SOUTHERN
TEXTILE BULLETIN
VOL. 28 CHARLOTTE, N. C., THURSDAY, AUGUST 13, 1925 NUMBER 24

Ball bearing boxes for exhausters and fans

Requiring no attention other than occasional lubrication, Fafnir Ball Bearing Boxes are being used more and more in exhausters and fans.

These machines are customarily located on platforms near ceiling, inside of picker frames, and in other out-of-the-way corners. Because of this inaccessibility weekly oiling and inspection, as demanded by plain bearings, are invariably neglected. As a result, plain bearings frequently become so hot that the fans must be shut down for repairs, tieing up the exhauster system.

On the other hand, with Fafnir Ball Bearings a greasing every three or four months is sufficient. Lubricant is retained in leak-proof housings,—it cannot seep out. Neither can dirt or lint creep in. Fafnir Bearings run continuously at 1000 to 2000 R.P.M. under heavy load without over-heating or seizing. Danger of fire from overheated bearings is prevented.

Write for sizes, dimensions and prices.

THE FAFNIR BEARING CO.

Makers of high grade ball bearings — the most complete line of types and sizes in America.

NEW BRITAIN, CONN.

Southern Representatives:

W. S. Shirley,
120 Bourbon St.
New Orleans, La.

A. G. Laughridge,
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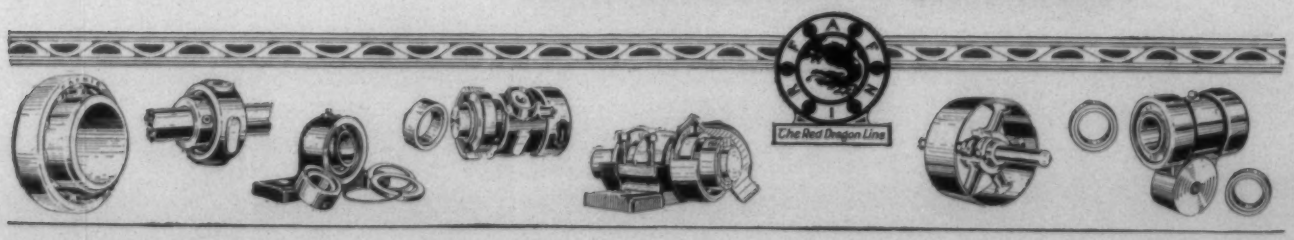
Single Row Pillow Block for exhausters, showing long inner ring, self-locking collar, two pressed steel dust caps, and retaining wire.

TYPICAL APPLICATIONS OF FAFNIR BALL BEARINGS FOR TEXTILE MACHINERY

Picker: beater and fan shafts
Spinning Frame: cylinder bearings
Card: licker-in, main cylinder
Slasher: large and small cylinders
Loom: crank shaft and loose pulley
Warper: measuring roll and cones
Twister: cylinder bearings
Cotton exhausters: fan shaft bearings
Hanger boxes, blower and fan boxes, and other transmission equipment.

FAFNIR

BALL BEARING
UNIT-ALIGNING
TRANSMISSION EQUIPMENT



Whitin Machine Works

Whitinsville, Mass.
August 13, 1925

To Ring Users:

In view of the misunderstanding which some of our friends have had relative to the manufacture of our Whitin Machine Works rings, it may be of interest to know that all Whitin Machine Works rings are produced by us, in our own plant and with our own facilities. They are separate and distinct from the product manufactured by the Whitinsville Spinning Ring Company, which is also one of the best and longest-established ring manufacturers in the country.

The history of our ring manufacture goes back to 1860. Later on, in the development of the business, we discontinued manufacturing rings. In 1912 we again started up our Ring Department. Since that time we have very largely improved our facilities for the manufacture of rings, with our output increasing correspondingly, so that today we are supplying every variety of ring with methods which we believe far in advance of those customarily used, our output being probably as large as any other ring maker in the world.

We believe that today our rings will prove themselves superior to any other make of ring.

Yours sincerely,

WHITIN MACHINE WORKS

SOUTHERN TEXTILE BULLETIN

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U. S. Cotton Crop 1924-1925

From Annual Report of Col. H. G. Hester, secretary of the New Orleans Cotton Exchange.

The Commercial Crop of the United States for the year ending July 31st, 1925, amounted to 14,698,356 bales, showing an increase over the crop of 1923-24 of 3,407,969 bales, and over the crop of 1922-23 of 3,415,550.

Of the year's increase, 6.4 per cent was in the "Other Gulf States" (principally Mississippi, Arkansas and Oklahoma), about 25 per cent in Texas, and 11 per cent in the Atlantic States.

The figures, in round numbers, are: Texas over last year 837,000; Other Gulf States over last year 2,195,000; Atlantic States over last year 376,000.

These comparisons, it must be remembered, refer to the Commercial Crop and not to growth. In other words, the growth of the year as indicated in the table below was 14,808,000 bales, whereas the amount marketed was 110,000 less.

The average grade of the crop was Middling. The range was from Strict Low Middling to Strict Middling. In Texas, Oklahoma, Louisana, Arkansas and Mississippi, the average was Middling to Strict Middling; in Tennessee and Alabama, it was reported as Middling, and in the Carolinas, Virginia and Georgia, Strict Low Middling. There were no extremely high or extremely low grades, and though the staple was poor, as a general rule the crop was clean and well handled.

Grade comparison with the six previous crops are as follows:

1924-25——Middling.
1923-24——Strict Low Middling to Middling.
1922-23——Middling.
1921-22——Middling.
1920-21——Barely Middling.
1919-20——Strict Low Middling.
1918-19.——Barely Middling.

The size of the crop was no impediment to its marketing and by the end of the first six months more than eighty per cent or over eleven and three-quarter-million bales had come into sight, of which eight and a half millions had been exported and gone into consumption. While our own mills were not a rabid for supplies, foreign consumers came into the market early and continued their takings on a liberal scale until the end. Naturally, the result was a clean-up of all we had to dispose of and between home consumption and foreign demand the excess of nearly three and a half million bales has disappeared, leaving little or none of the year's production in the cotton producing states. Domestic mills added somewhat to their stocks and foreign mills and ports increased their year end holdings, though not to the extent that had generally been anticipated, the increase in the carry-over in the United States and Europe having amounted to but 561,000 bales.

In fact, after years of scant supplies the world wanted all it could get of American cotton and took it and used it in their looms and spindles. All in all, the year has been most prosperous for the cotton producers. What was lacking in values per pound or bale, as compared with the last season, was made up in quantity produced which sold at living prices showing no violent fluctuations but moving off steadily and satisfactorily as the season progressed. If our home mills have not fully shared this prosperity, it is, to say the least, to be regretted, but of this mention is made elsewhere.

Of the eight and a quarter millions of bales, including Canada, exported during the past season, (which have not been equaled since 1914-15), Great Britain increased her takings by upwards of 830,000 bales, and we sent to Germany, in round figures, 1,885,000 bales against 1,300,000 last year and 934,000 year before last. We exported to France and other Continental countries liberal increases, while Japan and China took from us 923,000 bales against 574,000. As stated, we sold all we had to sell, barring a bare suffiency to protect our domestic mills and trade. In fact, of the 14,247,000 bales consumed during the past year, 7,787,000 were used by foreign mills. Not before, since 1915-16, has consumption of American cotton abroad passed the seven million mark. When it is remembered that monthly consumption has been on an ascending scale, it may be figured ou that if the present rate is continued it will require a larger crop than that of the past year to supply the world's spindles.

Foreign mills, as a whole, are in good shape and as stated by one authority "even in this country where mill operations have declined 15 or 20 per cent in the past few months, consumption today is running about 33 per cent larger than a year ago."

The average price of Middling (which was the average of the past crop) was 24.27 cents per pound, comparing with 31.67 cents last year, 24.06 year before last, and 17.78 in 1921-22.

The average commercial value per bale of lint cotton was $124.05, against $158.89 last year, $128.32 year before last and $90.38 in 1921-22.

The total value of the crop compares with the previous six years as follows:

	Bales	Values
1924-25	14,698,356	$1,739,593,374
1923-24	11,290,397	1,658,243,040
1922-23	11,282,806	1,388,606,882
1921-22	11,653,133	1,053,181,372
1920-21	11,377,316	940,537,360
1919-20	12,443,180	2,172,324,368
1918-19	11,639,653	1,710,715,068

These values, which embrace the Commercial Crop, are for cotton only and do not include the value of the seed. Thus the value of the crop for the past year, as stated, is $1,739,593,374; if the value of the seed be added, we should have a total of $1,980,530,374. Last year, the total, including seed, was $1,895,143,000, and the year before it was $1,574,299,839.

As indicated by the following approximate data, the quantity of cotton in the interior of the South has shrunk to small proportions, due to shipments of a considerable percentage of the cotton held over at the close of last season. The figures of July 31st were about (in thousands)

	This Year	Last Year
Southern Mill stocks	400	306
Counted interior towns	145	177
Uncounted towns and plantations*	214	167
	759	650

*Includes 64,000 New Crop of 1925-26, which plus 16,000 marketed at the ports makes total ginning of New Crop prior to August 1st approximately 80,000 bales.

Carry-over July 31st.
(In Thousands of Bales)

	This Year	Last Year
Southern Mill stocks	400	306
Counted interior towns	145	177
Uncounted towns and plantations	214	167
Total held in Cotton Belt	* 759	650
U. S. Port stocks	212	223
Northern Mill stocks	450	355
European Mill stocks	710	565
European Port stocks	749	526
Total Carry-over July 31	2,880	2,319
Lint cotton carried over	2,715	2,089
Linters carried over	165	230
	2,880	2,319

*Includes 64,000 New Crop of 1925-26, which plus 16,000 marketed at the ports, makes total ginnings of New Crop prior to August 1st approximately 80,000 bales.

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Mercerizing Piece Goods

MERCERIZING cotton goods in the piece has become a very important art and most bleach and finishing plants have more or less of it to do. Although the process appears rather simple (that is, passing through a padder and then stretching them on a tenter frame, and finally washing to remove the excess caustic), still each plant carries out this operation with slightly varying details. In some plants the goods are mercerized before boiling, while in others, after boiling, and in some special cases after bleaching. Some mercerize the goods dry, while others wet them out. The machinery also varies in details.

Whatever method may be used in the principle involved is the same; the changing of the cotton fibre from its original flat ribbon shape to a round rod-like shape, which reflects more light and consequently has lustre. The kind of cotton as well as the strength and temperature of the caustic, the duration of exposure of the fibre to the caustic and the tension under which the fibre is held, has a great deal to do with the lustre produced.

Effects on Different Cottons.

When a pure cotton fibre, one from which all the pectic matter has been removed, is exposed to the action of pure caustic soda of a 20 to 25 per cent concentration at room temperature (60 deg. F.) for about a minute, the twisted ribbon-like fibre is seen first to untwist, then to swell. become transparent and then contract about one-quarter in length and assume a round, rod-like appearance. If the fibre is then stretched under tension to nearly its original length and the caustic solution is washed from it while under tension, it will remain that length after the tension has been released, and will have taken on a much higher lustre than the original fibre. Not only has it undergone this physical change, but is has also undergone a chemical change. The exact change has not been definitely determined, but the reaction is supposed to take place in two steps: First, the sodium hydroxide combines directly with the cellulose, forming an alkali cellulose, and then the sodium is replaced by hydrogen during the washing, thereby forming a hydrated cellulose.

In mercerizing cloth which is made up of yarn spun from many cotton fibres the same action takes place. However, other factors enter into account during cloth mercerization: First, the length of the staple cotton used, and second, the twist of the yarn. As a general rule, the longer the staple the less twist is required to make a yarn of suitable strength. The individual fibres in this case lie more parallel than in a yarn of short staple, which has to be tightly twisted to give it strength.

Of course, combed cotton will give the best results in both cases, as combing straightens the fibres and lays them more or less parallel before spinning. It is these many lustrous parallel rod-like fibres which reflect the light in many directions, that give a high lustre to the cloth. With the cloth made up of tightly spun short fibre yarns, the surface is so broken up by the interlacing of the fibres that it does not reflect nearly as much light and is, therefore, not so lustrous. Also in the case of the latter, the individual fibres are not equally stretched after the action of the mercerizing liquor, and, therefore, do not acquire as high a lustre.

The grade of cotton used also has a great bearing on the results. Some cotton originally is more lustrous than others, and consequently when mercerized this same proportion holds. Sea Island cotton is the most lustrous and is, therefore, the best for mercerizing, but well-combed American cotton gives excellent results.

Various Mercerizing Methods.

The above refers mostly to what happens during mercerizing; but there is still another very important part in the process to be considered from a practical point of view, and that is the cost. This is the point that causes the various bleacheries to differ in their methods. The flolowing are some of the methods in use.

The cheapest method is to take the goods direct from the bale and sew them end to end and run them through the mercerizing range. After leaving the range they still retain some of the caustic, which is a help in the next process of kier boiling. The results thus obtained are only fair, because the caustic does not have a chance to penetrate into the fibre as it should, owing to the natural waxy coating and the size put in before weaving. However, if this is carefully carried out the goods will have a little more lustre than the original, and will

be a little more crispy to the feel and have greater affinity for dyes. It is suitable for certain cheaper classes of fabrics.

Wetting Out.

The next method is to wet the gray goods out on a water mangle with plain water or perhaps with a little soluble oil. Then, when the goods go through the caustic saturator they will be better penetrated. Consequently, the better the penetration the better the mercerizing, other things being equal. However, in this case a stronger stock solution of caustic must be used, because the wet cloth dilutes it considerably. Generally a stock caustic of 60 to 70 deg. Tw. is used. The lustre obtained in this method is only fair, but is greatly improved by Schreiner calendering.

A third method is to boil the goods in a keir, then wash and mangle and run through the mercerizing range. The principle is the same as the second method, but the results are better because the cloth has been freed from the waxy mattter and sizing by the keir boil.

A fourth method is to take the goods from the keir, as in method three, and wash, mangle and dry before running them through the mercerizing range. This method is the most expensive but, in the writer's opinion, gives the best general results, which more than repay for the slight extra drying cost. In this case the caustic can be reduced to about 50 deg. Tw., which saves considerable, especially when the wash water is reclaimed by evaporation. Also, more uniform mercerization may be expected throughout the lot than in cases where goods are wet out and put into box trucks to be delivered to the mercerizing range. In this case the water tends to seep to the bottom of the box and the top gets dry, especially when the boxes stand for any length of tim. The drier part will take on a little better mercerization, which will show up when the goods are dyed, because it will dye a little heavier in shade. In mercerizing wet goods the caustic must be kept at a lower temperature than when dry mercerizing, to off-set the heat of reaction between the water from the wet goods and the caustic.

Still another method is to run the goods through a padder containing the strong caustic and put them on rolls. The rolls are allowed to stand for a time, and then run through the mercerizing range. This method is resorted to only where the goods are heavy or hard to penetrate in the regular way.

One method sometimes used is to mercerize after bleaching, but this is carried on very seldom because there is a chance that oil stains or other trouble may develop which will require reboiling and rebleaching of the goods, thus adding expense to the process. There are several other methods of mercerizing, but they are used only in special cases.

The Operation of Mercerizing Range

The mercerizing ranges in use today may vary slightly in detail, but generally consist of a three-bowl padder, a tenter frame either 60 or 90 feet long, and a series of wash boxes, and most any weight goods, either wet our or dry, may be mercerized.

The goods enter either through the floor above or over a high crossbar, then straight down through cloth guides, which may be either the Foxwell or Bolton type, the former working much better in the case of wet goods. After passing through the guides the goods pass under and over a series of iron rolls, the lower set being submerged in the strong caustic liquor. Here the goods become impregnated with the caustic, and then pass through the lower nip of the mangle rolls. These rolls consist of two steel rolls with a rubber roll between them. After leaving the lower nip the cloth again passes into caustic to insure complete saturation. On leaving the solution is passes over a revolving roll which removes any double edges or wrinkles that may be in the cloth. From here it passes through the upper nip, where the excess liquor is thoroughly squeezed out.

Tension.

After leaving the nip the cloth passes over a tension roll. This roll moves up or down, according to the tension of the cloth, and may be weighted according to the strength of the cloth passing through. This insures an even tension on the warp threads at all times before the cloth enters the tenter frame and prevents much damage caused by excess tension due to the shrinkage of the cloth. The mangle and the frame are controlled by two different motors, and either one may be stopped for a fraction of a minute so that the tension may be regulated.

The goods enter the frame proper, and on a 60-foot frame the first section, which is about 10 feet, may be adjusted to receive the cloth and gradually pull it out to the proper width and keep it so on the remainder of the frame. On a 90-foot frame generally two sections, of 20 feet, are used for this purpose. This gives a more gradual pull and reduces chances of clip damage to the selvages.

The frame consists of two endless chains running parallel and supported rigidly to keep them free and level. Automatic clips are attached to this chain, and as the cloth enters here they grasp the selvages and hold the cloth taut. The more tension that is applied the tighter they hold. Therefore, if the cloth will stand the strain it can be pulled out to its original width. However, a slight allowance is generally made on all mercerized goods. It is due to this tension that the cloth becomes lustrous.

Washing.

At the last section of the frame the cloth is washed by spraying warm water to the heater and supplies the warm water for the spray pipes and is re-used as a spray. This increases the alkali content of the wash water and makes it economical to evaporate for re-use in the mercerizing bath. After going through the wash boxes the cloth is again squeezed as dry as possible, and is either packed into box trucks or bins and is ready for the next process.

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U. S. Cotton Crop 1924-1925

(Continued from Page 7)

American Mills.

In the South, mills as a whole have done fairly well and notwithstanding more or less curtailment during August and September and part of June and July, Southern Consumption has been the largest on record except that of 1922-23. For the most part, many mills ran night and day, some of them running overtime in endeavor to reduce average cost of production.

Northern Mills have done beter than last year though conditions are not generally satisfactory. Much complaint has prevailed South and North of inability to freely sell output on account of slow demand for goods.

Reduction in cost of raw material has undoubtedly helped the mills of this country; but the problem of satisfactory adjustment has still to be worked out. Meanwhile, there is an underlying feeling of hopefulness for the coming season that with a fair supply of cotton satisfactory results may ensue during the coming fall and winter.

Consumption North and South during the year, exclusive of foreign cotton, was 6,460,000 bales against 5,813,000 last year and 6,991,000 the year before last, an increase over last year of 614,000, and a decrease under the year before of 531,000.

World's Consumption of American Cotton.

Referring to tabular statement, the World's Consumption of American cotton was 3,006,000 bales more than last year and 1,616,000 over the year before last.

Mr. Thomas R. Ellison, of Liverpool, cables me his estimate of mill stocks July 31st, as:

Great Britain 230,000 of all kinds, including 130,000 American. Continent 840,000 of all kinds, including 580,000 American.

Exports.

Exports of cotton to foreign ports including shipments to Canada were 8,257,521 bales against 5,804,934 last year and 4,850,795 the year before, an increase compared with last year of 2,452,587 bales and compared with year before last of 3,406,726.

Cotton Consumption in the South

(From Returns by the Mills)
Year Ending July 31st, 1925

As a whole, Southern Mills have fared well during the past season but the situation has not been without its drawbacks.

In August and September and part of October, there was more or less curtailment but after that full time and in many instances night and day runs were in force until June and July when there was again a slackening off and even entire closing down by some of the mills.

In face of all this, the aggregate of the year's consumption of raw material was the largest on record except that of year before last, some of the mills running overtime in order to reduce average cost of production.

Conditions varied, some leading mills reporting good business and a fair margin of profit, others inability to freely sell output on account of poor demand for goods.

Altogether, however, the season has been distinctly better as compared with last year, and with promise of a good supply of cotton there is reason to expect satisfactory results during the fall and winter.

Including linters, the year's consumption (exclusive of foreign cotton) has totaled 4,380,118 bales, against 3,985,328 last year and 4,487,535 in 1922-23; an increase over last year of 394,790 bales and a decrease under 1922-23 of 107,535.

Ten new mills with 167,076 spindles were reported in operation and 12 in course of construction with 3,699 looms and 180,094 spindles.

World's Consumption of American Cotton For Past Year.

Ending July 31st
(In Thousands)

	1924-25	1923-24	1922-23
Visible and Invisible beginning of year	1,847	1,857	3,285
In sight, year	14,666	11,236	11,203
	16,513	13,093	14,488
Visible and Invisible Supply at close year	2,266	1,847	1,857
	14,247	11,246	12,631
Burnt at Ports	.....	5	.....
Total World's Consumption American cotton	14,247	11,241	12,631

Consumption American Cotton by Geographical Divisions.

(In Thousands)

	1924-25	1923-24	1922-23
United States—North	2,080	1,828	2,503
United States—South	4,380	3,985	4,488
Foreign	7,787	5,428	5,640
Total American for year	14,247	11,241	12,631

Packing Cotton Piece Goods For Export

THE correct making up and packing for export of cotton piece goods is so important as to have called into existence in recent years quite an army of experts and specialist houses. Newcomers to the Manchester trade have been known to evpress surprise that firms survive—and richly justify their survival—"merely by packing." Yet such a phrase indicates ignorance by its user of the manifold complexities of trade practice, customs laws, port facilities, and climatic conditions, all of which must be understood by the packing specialist before he can properly serve British exporters of soft goods.

Practical men agree that the chief "snag" in packing goods for shipment is a mistaken zeal for economy. Despite the admitted importance of cutting costs in every possible direction if export trade is to be retained and regained, packing must be looked at in conjunction with the general selling problem. It is ridiculous to save two shillings by using inferior packing and spend two pounds on extra insurance premiums or on the subsequent pressing of an insurance claim. Goods must be so packed that they are likely to reach their destination in perfect order and at a reasonable expenditure on freight, insurance, and carriage charges.

The problem, therefore, centers around the conflicting claims of cheap transport on one side and immunity from damage for the goods on the other. Wooden cases are made as light as is consistent with safety. Tin or zinc lined cases are almost essential for many markets, and their extra cost must be considered against the saving on insurance that results from their use. Various kinds of patent cases are on the market, and their cost is "worth while" if they keep valuable goods safe from damage or pilferage. Patent wire binding systems and metal case seals serve similar purposes—the light metal "Sphincta" seal being especially useful. This does not profess to prevent cases being tampered with; it ensures that they shall not be tampered with without detection, since once the thin metal seal has been prized up it cannot be reinserted in the original holes. Hence the receiver will be warned against giving a clean receipt for goods, and thereby releasing the transport authorities from their liability.

On the other hand, it is sound economy to try to reduce the amounts payable for railway carriage and freight by getting a given quantity of soft goods into the smallest possible cubic measurement, and manufacturers generally need no convincing that the cost of press-packing is well worth while. Dock charges and frieght are usually charged on measurement, and since outside measurements are taken exterior battens are giving place to inside metal bands.

Any instructions given by buyers as to packing should be closely followed, no matter how irksome they seem. The importer is likely to know by experience what conditions of climate, rough usage, etc., must be met, and he should not be given any loophole for complaint by the neglect of his directions. A request that gross, tare, and net weights be furnished in kilos, for example, usually arises because such information is insisted upon by the customs officials of the country of importation Sometimes a fixed allowance for tare may be made; in other instances an average tare may be used, but most South American countries collect duties on gross weights. Further, it is often imperative to study the classification of dutiable goods and see that articles on different ratings are not placed in the same package. In Venezula, for example, the rate payable on the highest taxed article is applied to the entire shipment when articles subject to different rates of duty are imported in the same packing. Again, Cuba levies a tax of uniform character on each package—whether large or small,—hence importers prefer to receive goods in very large cases or bales, so as to reduce the burden of the tax.

In many markets cases weighing 4 or 5 cwts. are welcome, but there are many limited factors when inland journeys under adverse conditions have to be made from the arrival port. Goods for Bogota, Medellin, and other interior markets of Colombia, for example, should not be placed in cases weighing more than 150 pounds each, since tranport on mule-back over mountainous country is essential to complete delivery. Elsewhere goods are transported inland by llama, bull, camel, burro, elephant, or by manual labor, and such transportation demands a rigid limit to the weight of cases. A mule can usually carry up to 250 pounds, a burro up to 200 pounds, a llama about 100 pounds, and a camel up to 450 pounds, but packages to be carried by these animals should be one-half the weights mentioned, since one package is carried on each side. Men carriers can handle from 100 to 150 pounds.

Port conditions are also an important factor in export packing. In many parts of the world ocean steamers cannot berth alongside well-equipped quays, and goods are subjected to rough handling in the process of being hoisted overside into lighters, perhaps while a heavy sea is running. A sling load will contain a ton or more of miscellaneous packages varying greatly in strength and contens. While the lighter rises and falls on the waves the sling load will be maneouvered towards it. Contact will be made suddenly, and only the strongest packages will survive the crash—to face a second ordeal at the time of removal from lighter to quay.

Packers have to consider the climatic conditions through which traffic will move. Honduras, for instance, suffers heavy rains for at least five months in the year, and freights for the interior must be

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Foam Dyeing

FOAM dyeing differs greatly in principle from all the other methods employed for dyeing cotton, in so far as in this case it is not the water that carries the dyestuff on to the fibre, the material to be dyed not coming into contact with the liquor at all In foam dyeing the material is dyed by a colored froth that is produced by boiling a short liquor with soap, turkey red oil, or the like The dyestuffs which are added to the water will go up into the lather, which penetrates everything with which it comes in contact, including the material that is intentionally put into its way to be dyed by the lather or foam. Foam dyeing has certain important advantages over other methods of dyeing the greatest advantages being that of requiring only a very short bath, and therefore very little dyestuff. In addition to this the apparatus required is very simple, as compared with the expensive apparatus of machine-dyeing plants. Moreover, it requires no power at all.

The apparatus required for foam dyeing consists chiefly of a square wooden box containing a loose lattice work receiver or cage. The receiver has four feet of such a length that its lattice-work bottom is 10 inches distant from the floor of the wooden dyeing box into which it is placed. At the bottom of the wooden dyeing box, and under the lattice-work receiver, there is a closed steam coil made of piping 1¾-in. or 2 in. in diameter. The steam coil is arranged for indirect heating, to prevent thinning of the liquor, which could otherwise easily interfere with the work, owing to the addition of an excessive quantity of condensed water to the bath. The total heating surface of the pipe in the bottom receptacle provided for the dye-bath is about two or three times that of the area of the floor of the box, according to the size of the box. The steam is fed by a thinner pipe, and the coil also leads into a thin pipe, which projects upwards out of the box. The latter pipe is generally provided with a tap for adjusting the steam to requirements, and to regulate the flow of condensing water. The end of this pipe is bent so as to discharge the condensing water into a funnel, which has a tap at its lower end, and which is also connected to a pipe reaching almost to the floor of the wooden box. The condensing water is utilized to add to the bath the water which it has lost by steaming, the amount added being regulated by the tap.

An important consideration in foam dyeing is the necessity of having dry steam. A good and even foam cannot be expected unless dry steam can always be relied upon. For this reason it is always best to place the apparatus in near proximity to the boiler-house. Note that for the same reason the steam pressure should be as high as possible. Moreover, it is clearly advisable to use high-pressure steam, if such is at the disposal of the works.

A water-gauge is branched off near the bottom of the wooden box, to indicate the heigth of the liquor. in this connection it should be noted that the liquor must not reach the lattice-work receiver or cage. Suitable lifting tackle must also be provided, to permit of easily lowering the material in the container into the wooden box, and to lift it out.

After having produced a first lather by a preliminary boil of the liquor containing the dyestuffs, as well as the foam generators, the steam is shut off. The receiver with the dry material should not be previously wetted in any way, nor should it be boiled. As soon as the receiver has been lowered into the box a second boil-up must again produce a fresh lather which must completely cover the material. The liquor is then kept boiling for an hour or so. Care should be taken to keep the lather up. The lather that is being continually produced rises is the receiver or cage, and thoroughly penetrates the material; it carries with it the dyestuffs contained in the liquor, so that the dyeing is carried out by the lather, not by the water. Of course the lather must be kept sufficiently high to cover the material completely.

After the lather has been kept up like this for an hour or so the steam is shut off, when the lather will immediately subside. A sample can then be taken from the yarn to be examined. I it is necessary to add more dyestuff the cage is lifted out, the dyestuff added through the funnel leading down to the bottom receptacle, and the cage or holder is then put back again in the wooden dyeing box.

As regards additions to the dye-bath the same applies as in the case of ordinary baths, but some peculiarties have been found in practice. Light colors are best dyed without the addition of salt. Sulphur colors generally give the best results, but they require rather a larger amount of sulphide of soda to be added, and the sulphide of soda must be very pure in this case. Colors that are not easily soluble in water should not be dyed by the foam method. Standing baths may be used for standard colors. If several standard

colors recur fairly regularly it is best to have separate apparatus for each of the several colors. After dyeing, the lattice container or cage is taken out and placed in a rinsing bath in any convenient vessel at the side of the apparatus.

Substantive colors that do not require washing will not require the lattice container either. In this case the appartus may be conveniently modified as follows: The lattice cage is replaced by a simple double bottom of lattice work in a height of about 10 in. from the bottom of the wooden box. The material is placed on this double bottom. A wooden door is arranged in front of the box to allow of taking the material out ofter dyeing.

Foam dyeing as a method can only be recommended for cheap goods where little differences of shade do not matter. Improvements in the apparatus would only render the latter dearer, and the method then loses it principal advantage—that of being cheap. The principal field of foam dyeing is doubtless that of standard dyes on cross-wound cheeses. Cops and hanks can also be dyed according to this system, but even shades cannot be produced on them.—Reprint from Dyestuffs, of article in Textile Manufacturer, of Manchester, England.

Southern Spinners' Bulletin

The weely bulletin of the Southern Yarn Spinners' Association says:

The siutation of the yarn market remains unchanged. Prices are at about the same level as last week. The Eastern markets report that the price situation is at a deadlock; spinners firm in their quotations, and customers unwilling to pay prices asked, with the result that there is but little or no spot business, and no inclination on the part of buyers to purchase their future requirements. Today's level of prices are below replacement costs based on present prices of cotton.

A comparison between New York spot cotton of August 4, plus waste, and yarn prices quoted in Charlotte, Boston and Philadelphia shows as follows:

New York spots August 4, 24.40, plus waste makes the cotton in goods cost 28.70.

Charlotte quotations:

12-1 skeins at 41.00 less 5 per cent commission, 3 per cent discount, 90 cent freight, equals 36.88 net. 20-2 warps at 46.00 less 5 per cent commission, 3 per cent discount, 90 cent freight, equals 41.49 net. 30-1 hosiery cones at 49.50 less 2 per cent commission, 2 per cent discount, 90 cents freight, equals 46.64 net.

Boston quotations:

21-1 skeins at 39.00 less 5 per cent commission, 3 per cent discount, 90 freight, equals 35.04 net. 20-2 warps at 45.50 less 5 per cent commission, 3 per cent discount, 90 cents freight, equals 41.03 net. 30-1 hosiery cones at 45.00 less 2 per cent commission, 2 per cent discount, 90 cents freight, equals 42.32 net.

Philadelphia quotations:

12-1 skeins at 37.50 less 5 per cent commission, 3 per cent discount, 90 cents freight, equals 33.65 net. 20-2 warps at 41.00 less 5 per cent commission, 3 per cent discount, 90 cents freight, equals 36.88 net. 30-1 hosiery cones at 44.00 less 2 per cent commission, 2 per cent discount, 90 cents freight, equals 42.26 net.

The difference between net yarn prices and cost of cotton in goods shows the following manufacturing margins:

Charlotte quotations:	
12-1 skeins Mfg. margin	8.18
20-2 warps Mfg. margin	12.79
30-1 Hos. C. Mfg. margin	17.94
Boston quotations:	
12-1 skeins Mfg. margins	6.34
20-2 warps Mfg. margins	12.33
30-1 Hos. C. Mfg. margins	13.62
Philadelphia quotations:	
12-1 skeins Mfg. margin	4.95
20-1 warps Mfg. margin	8.13
30-1 Hos. C. Mfg. margin	13.55

The above manufacturing margins, compared with the average costs for the three numbers of yarn, show that the Charlotte prices, which represents the spinners' quotations, are barely at replacement cost. The Boston prices, which represent sales made by spinners, are below replacement costs; and the Philadelphia prices which represent resale of stock yarns, are considerably below replacement costs.

With manufacturing margins below actual cost of manufacture (without profit), evidences that business taken at the present level of prices means actual loss to the spinner. In view of the shortage of old crop cotton, and the price at which the new cotton can be procured, the spinner would be facing certain loss to manufacture yarn for sale at present prices. Unquestionably and accumulation of stock will further depress the already sluggish market. Any competition among spinners for spot cotton would increase the price. The only remedy for the situation is curtailment. If spinners appreciate the situation, they will unquestionably apply the remedy, and reduce operations to the extent of causing a shortage of yarn and thereby creating a demand and raising the level of prices.

German Textile Industry Well Occupied.

The financial situation among the German textile mills has improved noticeably during the past few weeks, the Department of Commerce is advised by Consul C. T. Steger, Dresden. Fewer firms have failed to meet their obligations, and those affected have practically all been comparatively small undertakings. Retail sales have been better than usual at this time of year, and stocks are now fairly light. The cotton industry is probably the best occupied among the various branches; the wool industry, on the other hand, reports a lack of orders, ascribed chiefly to the continuing uncertainty on the raw wool market. Manufacturers of knit and tricot goods are busy with orders for summer wear and for a few hosiery specialties. The rayon industry, likewise, continues to operate at capacity.

Cotton Cloth Prospect

A NEW cotton year opens with cloth manufacturers in a much better position than they were a year ago. Curtailment of production is down only to about 15 per cent off normal average capacity, compared with 40 per cent off last year at about this time. Stocks of goods in mill warehouses are decidedly lower and cotton holdings have certainly not declined. Some men think the invisible supply in hand or under control of mills is larger than last year at this time.

While the market is quiet as the month closes, it was more broadly active in July than in June. Sheetings, hose and belting duck, twills, sateens, tire fabrics of a heavy nature that go into specialty manufacturing were sold more liberally and generally than for some months previous. The large corporation printers continue very busy and print cloth markets are very well sold up from four to six weeks ahead.

Hard Competition for Business.

Owing to the intense competition for business, due, some merchants say, to the existence of an overproducing capacity for normal requirements, the prices for many goods were too low to admit of profit, based upon replacement costs as they existed at the time of sales. There seems to be no immediate remedy for such a condition, but it is of special significance that manufacturers and merchants are now co-operating to interchange information of stocks, production and sales, that will help materially to acquaint the trade with the real situation in time to improve it.

Curtailment of production, although urged persistently by leaders in the industry, has come about quite as largely from necessity as prudence, and it has been more difficult to re-establish a satisfactory margin of profit for that reason. In small and large communities the rivalry to operate mills has caused them to be operated to capacity and even overtime, when, in the opinion of good merchants, the exercise of wiser judgement would have steadied values and hastened the time when they would make less severe inroads into mill reserves.

Foreign Trade Factors.

The balance of foreign trade in cotton goods is still greatly in favor of the United States. There has been a distinct shrinkage in the imports of fine cotton goods, not because such merchandise has been in lighter demand here, but because domestic mills have been supplying many of the requirements of the satisfaction of customers. Far Eastern trade has been small, as a rule, although the June and July business was the best done in three years or more. An improved volume of business has come from Manila, Cuba, and some of the South-American countries.

In those houses that are still maintaining foreign sales organizations the opinion prevails that the next six months will see a better trade than that booked in the past six months. While the probable high price of cotton will limit it in some respects, the variety and style of many of the cloths now available from this country for foreign markets is expected to help in increasing sales in those quarters where knowledge of the foreign business is being fostered or added to.

Rayon and Cotton.

No topic is more freely discussed in the cloth markets than the probable effect of rayon upon cotton c'oth merchandising. At the present time the immense volume and variety of samples and goods shown for future delivery made of rayon and cotton mixtures gives promise of cutting greatly to the call for all cotton goods in dress fabrics, some lines of underwear, some of the upholstery goods, bedspreads, etc. The actual volume of cotton displacement by rayon will be small at best, as the world output of the new fiber is only an equivalent of 300,000 bales of cotton in weight The effect upon cotton goods merchandising is quite another matter and is anyone's guess, with the chance favoring the idea that the expert will be as far wrong as the non-expert in trade.

For a time, at least, it is believed that the new rayon mixtures will impede a full distribution of ginghams, knit underwear, lawns, batistes, the more staple percales and bleached cotton and a miscellaneous range of wash fabrics of all cototn.

Frequent Cotton Reports.

Cloth merchants and manufacturers are protesting against the frequency of cotton condition reports and cotton crop estimates issued by the Government. They find that cloth orders hesitate to do business for days in advance of a report and will not resume business quickly after the publication if the speculative cotton markets move in a pronounced way because of it. No fault is found with the multplicity of private reports as it seems to exert no noticeable effect upon the cloth markets. It is the hall-mark

(Continued on Page 26)

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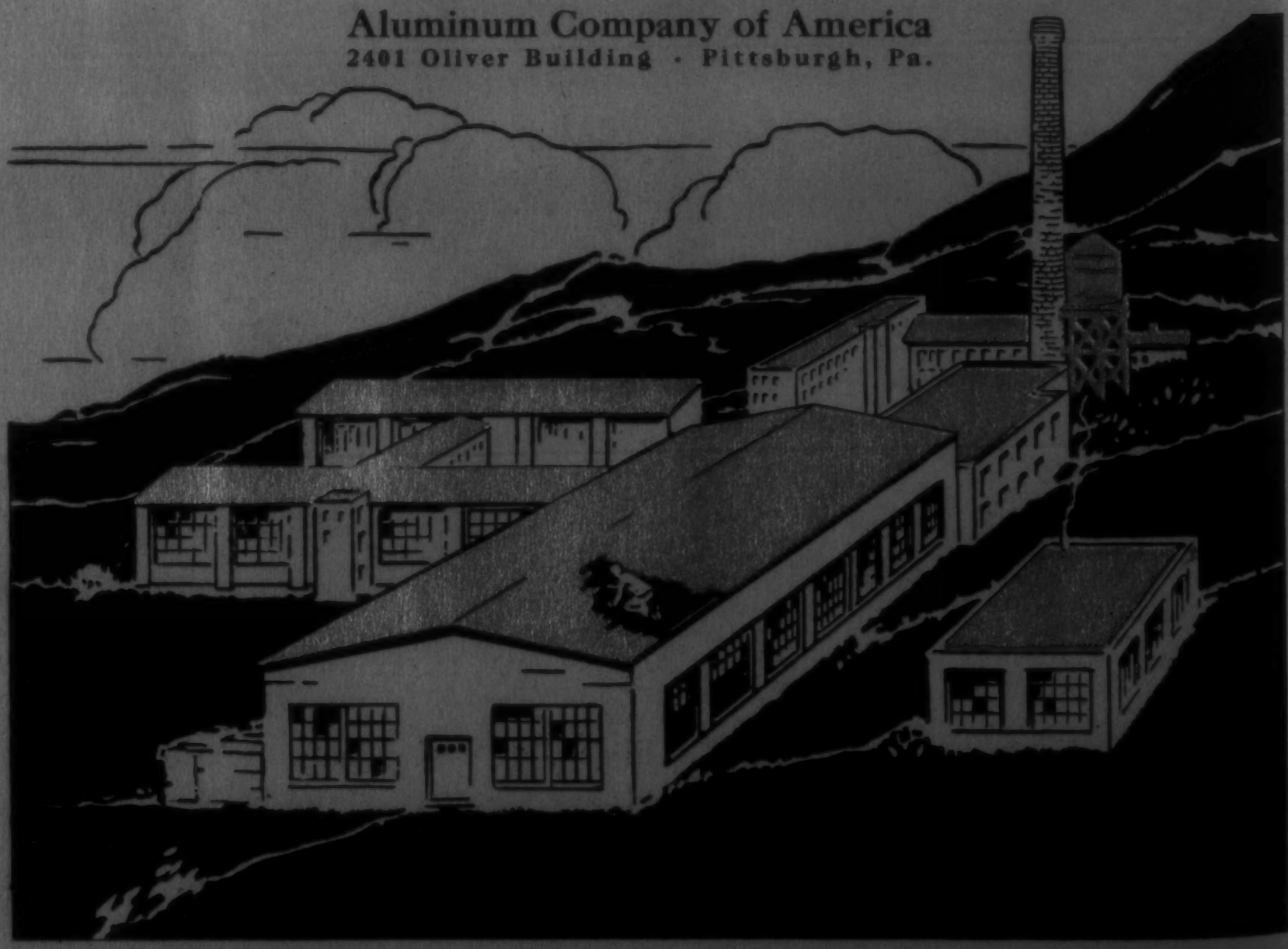

Textile Production Lower

IN general, productive activity in textiles has been less recently than during the early months of the year, but greater, however, than during the same period in 1924, according to a summary of business conditions throughout the United States published in the August issue of the Federal Reserve Bulletin.

Particular mention is made of the silk industry, which, according to the bulletin, has continued unusually active throughout the entire year. Improvement is also noted with respect to most textile markets, based on a slight increase in buying activity and strengthened prices.

Textile comment contained in the Bulletin follows:

"Cotton goods and yarn markets have been somewhat more active in recent weeks, and price advances have been noted again for the first time since last March. The lowest figures since 1922 were recorded by the Fairchild index of cotton yarn prices on June, and by the goods index on June 27.

Follow Raw Cotton Changes.

"In recent weeks these prices have tended to be affected by fluctuations in the raw cotton market. A rise in quotations on goods and yarns was checked after the large crop estimate on July 2; later in July, however, they increased again, and rather sharp advances followed the reduced crop forecast of July 23. Buying of goods slackened somewhat about the middle of July, but became active again after the latest crop report.

"Consumption of cotton by mills and active spindle hours were reduced in June, but not to as great an extent as in the same month of 1923 and 1924, and both of these measures of manufacturing activity were considerably greater than a magnitude in New England than in the South. New England mills, on the other hand, have shown a greater increase since the low point of last year than have the Southern mills.

Finishers' Orders Increase.

"Cotton finishers reported larger orders but smaller shipments and billings in June than in May. Employment and payrolls in the cotton finishing industry were unusually large in March, but have declined steadily since that time.

"Spring lines of woolen and worsted piece goods for men's wear were opened the latter part of July, with prices in general about 7 per cent lower than the corresponding opening a year ago. About the same time wages were reduced approximately 10 per cent in many important New England mills. Tropical goods were opened early in July with reductions on some lines.

"Markets for woolen and worsted goods and yarns have been rather dull recently, awaiting the openings. The number of active machinery hours in the industry during June was less than in any month since since last August. Wool consumption on the other hand, according to preliminary reports, was slightly greater in June than in May.

Raw Wool Markets.

"Raw wool markets became more active in June and July and prices rose. London auctions opened and sales were resumed in Austrialia early in July, and subsequently markets were reported to fairly strong and active. Acording to the Fairchild indexes prices of raw wool tops and worsted yarns, after rapid declines early in the year, reached low points in May and June and have recently advanced.

"Seasonal movements of employment and payrolls were noted in the clothing industries during June—up in men's clothing and down in women's clothing. In the former industry, however, the indexes were smaller than a year ago, while for the latter they were approximately the same.

"Since last fall the silk industry has passed through a period of activity greater than at any time since 1920. Imports of raw silk continued rather large in June and warehouse stocks were increased, but mill takings were large, and reports indicate that manufacturers were operating at a high rate, with employment and payrolls as large as at any time in the last five years. Futhermore, the demand for goods has continued active, the volume of unfilled orders large and prices firm.

"About July 1 quotations on Kanzai No. 1 raw silk in the New York market rose to over 6½ cents, the highest price recorded since the spring of 1923. A slight recession has occurred since that rise.

"Some manufacturers have opened their spring, 1926 lines of underwear, but many have not yet announced new prices. Quotations available are approximately the same those of a year ago. Reports indicate that the volume of buying has recently been rather small. Statistics for Jun showed an increase in the production of winter underwear and a decrease in the output of summer garments. New orders were smaller than in May, but shipments increased. Stocks showed another increase.

"Lower prices for the spring of 1926 were recently announced on bathing suits by certain important producers.

"The hosiery market has continued fairly active. Preliminary figures indicate an increase in shipments during June and slight decreases in in production and new orders. For women's full-fashioned hose, however, all items increased."

Cotton Mill Processes and Calculations

By D. A. Tompkins.
Copy Revised for Third Edition.

(Continued from Last Week)

61. Montforts Comber, Figs. 15, 16.—LETTERING.

A. Lap.
B. Feed Rolls.
C. Sheet of Lap being fed.
D, E, F, G. Severing Rolls.
H. Upper Movable Nipper.
J. Lower Stationary Nipper.
K. Comb Cylinder.
L. Binding Roll.
M, N. Rear Nippers.
O. Fluted Segment on Comb Cylinder.
P. Needles on Comb Cylinder.
Q, R, S, T. Rear Rolls.
U. Brush.
V. Doffer Cylinder.
W. Doffer Comb.

Montforts Comber, Figs. 15, 16.—OPERATION.

Lap is fed forward intermittently by feed rolls B to rolls D, E, F, G, and nippers H, J.

When the proper length projects beyond the nippers, the

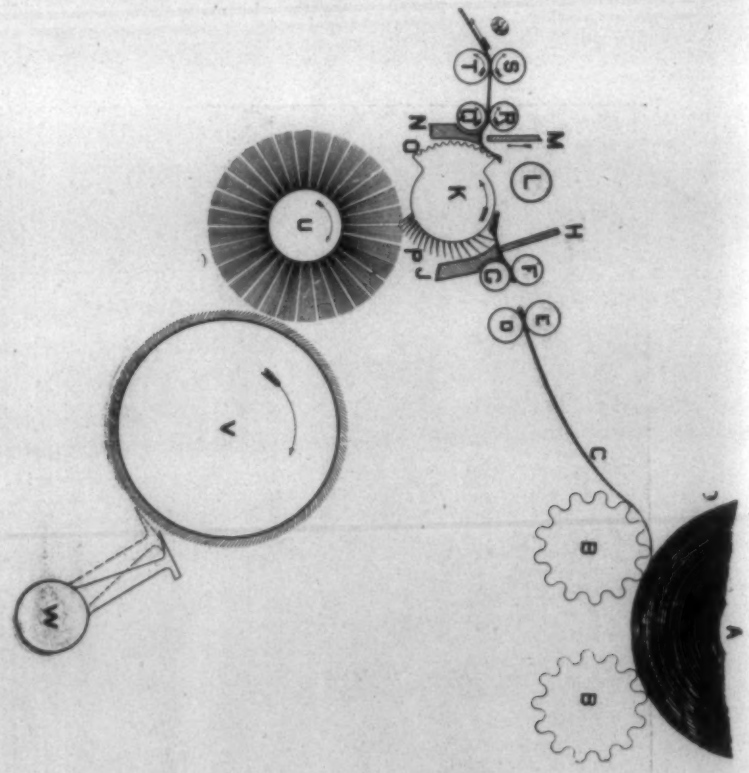

Fig. 15. Montforts Comber.

rolls F, G stop, and the upper nipper clamps down.

Rolls D, E revolve backward and break the sheet.

The needles on comb cylinder pass through projecting sheet and comb the front end, as shown at X, Fig. 16.

Comb cylinder continues to revolve until fluted segment catches the detached tuft. Roll L comes down on this, as shown in centre of Fig. 16.

The tuft is carried forward and laid on the preceding sheets

between the rolls O, R, where it is spliced by the pressure.

Rear upper nipper M clamps down and holds the sheet while the needles comb the rear end as shown in upper part of Fig. 16. This view shows one part of the needles combing, front end of one tuft, and another part combing rear end of the preceding tuft.

Rolls S, T run somewhat faster than rolls Q, R, and thus produce a draft, which evens up the sheet, between these two pairs of rolls.

Brush and doffer cylinder and doffer comb operate in the same manner as in the Heilmann comber.

Arrows on the rolls indicate the respective directions of rotations at the various periods. Where no arrows are shown, there is no rotation at that period.

62. These combers differ from the Heilmann principally in the following particulars: (1) There is no top comb. Both

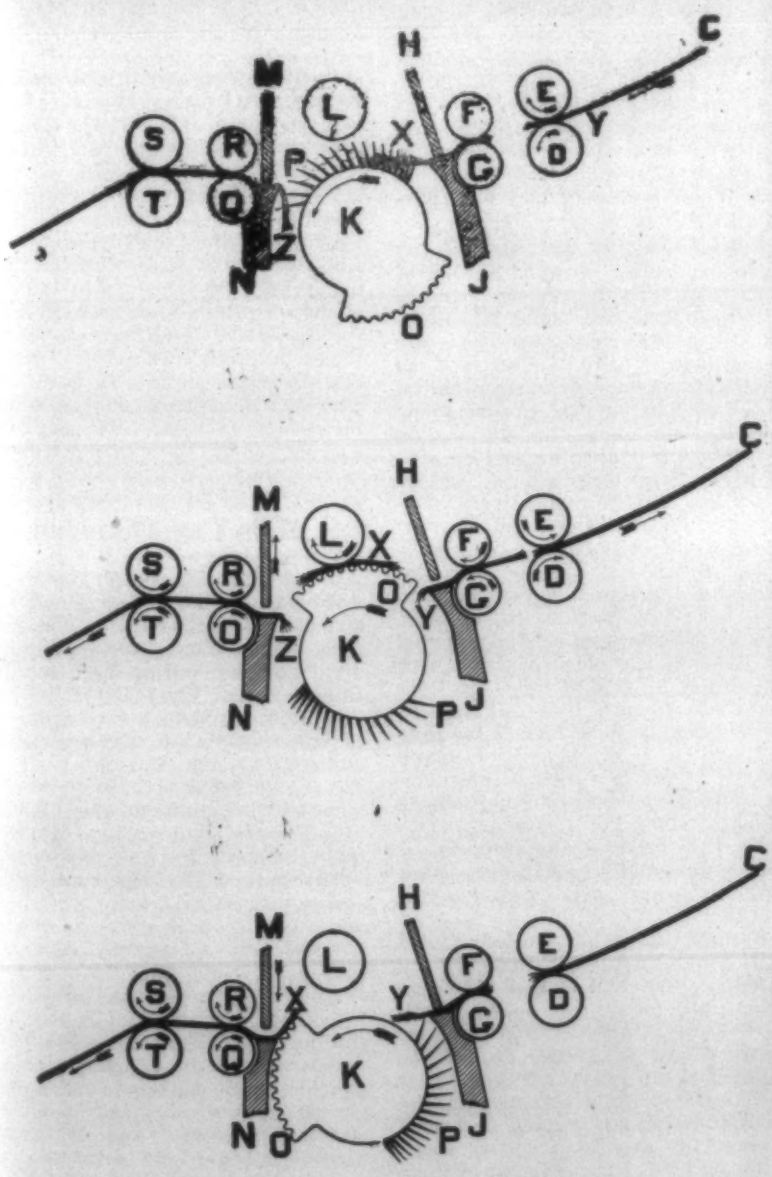

Fig. 16. Montforts Comber.

ends of the tuft are combed in the same manner, by the cylinder needles. (2) Only one nipper in a set is movable. This enables the nip to be very close to the combing needles, and thus allows the combing of shorter staple. (3) They are equipped with metallic rolls, instead of leather covered. (4) The lap is very much wider.

A great stride toward better quality of yarn has been made with the introduction of the new type of machine which will successfully comb American cotton of 7/8 to 1 3-16-inch staple.

(Continued on Page 27)

Substantial Gain in Textile Exports

Textile fibers and textiles represented 26.7 per cent of the total value of United State exports of domestic merchandise during the fiscal year ended, June 30, 1925, when shipments of all classes of textile commodities to foreign countries aggregated $1,274,987,000—an increase of $185,228,000 over the previous 12 months according to the Textile Division of the Department of Commerce. Raw cotton accounted for 83 per cent of the total value of exports in the textile group in both years.

Exports of raw cotton, including linters, rose from 5,731,936 bales valued at $903,795,000 in the fiscal year 1924 to 8,204,941 bales with a value of $1,060,886,000 in 1925—an increase of 43 per cent in quantity but of only 17 per cent in value. The latter figure reflects the decline in the price of middling spot cotton in New York, the monthly averaged having dropped from $0.3063 per pound in 1924 to $0.2536 in 1925.

Europe took 87 per cent of the American cotton shipped abroad in both year. Its purchases increased from 4,980,051 bales in 1924 to 7,119,258 in 1925, and show the same percentage of gain, 43 per cent, as do the total exports of raw cotton to all countries. The United Kingdom and Germany, the two leading markets for American cotton, increased their takings by 928,294 bales and 520,499 respectively. Although consumption figures for these countries have not been published for recent months, statistics available indicate that consumption has not kept pace with imports. Stocks of American cotton reported on hand at the close of June, 1925 amounted to 240,000 bales at Bremen and 561,000 bales at British ports. Comparative figures for June 1924 are 118,000 bales at Bremen and 248,000 at British ports. Inasmuch as neither consumption nor stocks at ports show gains commensurate with the increase in imports, it seems reasonable to assume that manufacturers are accumulating stocks.

Foreign sales of United States cotton manufactures increased from $126,962,000 in 1924 to $148,163,000 in 1925. Shipments of cotton cloth abroad rose from 428,690,000 square yards worth $72,746,000 in 1924 to 552,822,000 square yards valued at $87,168,000 in 1925. During 1925, the Philippine Islands ranked first as a market for American cotton goods followed by Cuba, a reversal of their positions in 1924. South America purchases aggregated 141,885,000 square yards of cotton goods in 1925 — a gain of 47,850,000 square yards over 1924. Columbia bought almost twice as much American piece goods in 1925 as in 1924, and substantial gains were also recorded in the takings of Argentina, Chile, and some of the smaller South American countries. A marked improvement is also shown in the total exports to Central America, Haiti, and Mexico.

Substantial increases were registered in United States exports of both silk and rayon hosiery in 1925 as compared with 1924. The United Kingdom took over half of the American silk hosiery shipped abroad in 1925, its purchases having mounted from 263,008 dozen pairs valued at $2,504,662 in 1924 to 672,298 dozen pairs with a value of $5,516,594 in 1925. These heavy shipments probably can be ascribed in large part to the efforts of British importers and dealers to acquire stocks before the British duty on silk hosiery became effective.

Profit of Pacific Mills

Spartanburg, S. C.—The Pacific mills, having a branch in Spartanburg county and home plant in Boston, announced Tuesday a profit of $530,303 during the six months period ending June 30, 1925, against $1,368,930 for the same period of 1924.

Net sales for the first half of the current year were $27,795,502 against $17,122,685 up to June 30, last year.

The company declared a quarterly dividend of 75 cents the same as three months ago, payable September 1, to stock of record August 15.

While the report shows the company had a busy half year, the results of the second quarter were not quite as satisfactory as the first when net profits were $461,183. Sales for the second quarter also fell off somewhat, being $12,785,834, against $15,009,668 for the first three months. The indicated profit of but $69,120 for the second quarter is said to be a reflection of the sharp falling off in sales in the worsted department.

Mills Pay Dividend

Henderson, N. C.—Payments of dividends by both the Henderson and Harriet cotton mills has been resumed following the passing of dividends last spring for the first time in recent years. Dividends paid now were to have been payable as of September 1, but were anticipated and mailed August, 1 the brief advance coming on account of the passing of the dividend last spring. Total money paid out was approximately $70,000 for the two mills.

The outlook for the coming fall and winter is said to be very good and officials of the corporations are hopeful and optimistic. They say they have orders ahead and that the textile industry shows signs of a somewhat brisk revival in the next few months. The mills are all idle this week for the summer vacation and to permit repairs to machinery. Operation will be resumed next Monday, however, and all plants plan to operate both day and night shifts. The local mills have not curtailed production at all this summer.

Westinghouse Co. Issues New 1925-27 Catalogue

The Westinghouse Electric and Manufacturing Company is distributing its new 1925-27 catalogue of Electrical Supplies. The catalogue presents a complete representation of the apparatus manufactured by the Westinghouse Company, or obtainable through its district offices or jobbers, and gives detailed information on electrical supplies.

The publication which contains 1200 pages and is profusely illustrated with 4500 engravings, lists all new apparatus designed and manufactured in the past two years, as well as all the previous established types.

Four indexes for the convenience of the user have been included in the catalogue. A very complete subject index in the front of the book is printed on blue paper so that it can be quickly located, and a style number index for checking invoices is located in the back of the book . A classified index under such classifications as central stations, electric railways, industrial plants, mines, etc., gives a complete list of apparatus applicable to each of these groups of industries, and the thumb index enables the user to locate any section of the catalogue with the least inconvenience.

Some interesting facts about the 1925-27 catalogue, showing the immensity of the task of publication, are that it required more than a ton of ink for printing, 10 tons of type to set up the text, 12,000 yards of cloth and 15 tons of binding to make the covers, and 4500 engravings for the reproduction of photographs and diagrams. To paste the thumb index tabs in the notches a feature designed to assure convenient reference, required the labor of 29 operators for 45 days, and the paper used to print the complete edition, if spread out flat, would cover an area of 25,000,000 square feet.

Amoskeag-Parkhill Merger Planned

Boston, Mass.—Shareholders of the Amoskeag Manufacturing Company will be asked to approve, at a special meeting, August 25 a plan unanimously approved by the trustee for sale a new voluntary association or trust all the manufacturing assets, currents bill and accounts receivable, and $6,000,000 in cash. All cash above that amount and all investments and securities are to be excepted from the plan.

The proposed organization also plans to acquire the Parkhill Manufacturing Company. The name of the new organization would be the Amoskeag Company.

Trustees say that the consolidation will provide valuable economies, and result in the segregation of the present Amoskeag from the investment funds.

The new voluntary association is to have an authorized capital of 285,000 shares of preferred and 365,000 shares of common, all without par value. The plants of the Amoskeag and Parkhill are to be paid for on the basis of one common share for each $100 of value, according to the appraisal by C. T. Main as of June 1 and July 1, respectively.

On the basis the present Amoskeag Company would receive 264,720 preferred shares, and 330,000 common shares, and the Parkhill Manufacturing Company 20,280 preferred shares and 35,000 common shares.

The trustees of the Amoskeag Manufacturing Company, in a letter to the shareholders, say:

"After giving the matter serious consideration, the trustees are of the opinion that the proposed consolidation will be advantageous. It should give the company an even stronger position in the textile field than it now has. The new manufacturing concern will have a strong financial structure; it should have a large earning power in the product of the company and that of Parkhill Manufacturing Company, which are largely supplementary to each other, rather than competitive. The organization and management of the Parkhill Manufacturing Company will be valuable in carrying our combined business, and economies which can be made in production and marketing fully justify, in the opinion of the trustees, the creation of the new organization.

"Substantial advantages may be expected to result from the ability of the combined company to produce at each plant the kind of goods which may be there produced to the best advantage. The basis proposed for the issue of the new shares is fair to all parties concerned."

The trustees advise the shareholders to approve and authorize the proposed sale.

Lullwater Plant Closed Indefinetly

Greenville, S. C.—The local plant of the Lullwater Manufacturing Company, of this city will be closed Saturday for an indefinite period according to information issued by H. B. Boddie, acting superintendent of the mill.

Mr. Boddie did not know why the mill was being closed, the order for the suspension of operations having been issued some time ago by Walter T. Candler, of Atlanta, president of the Lullwater Manufacturing Company, of which the local mill is a branch. Mr. Candler was in Greenville recently and instructed B. J. Boddie, superintendent of the mill, to report to the company's mill at East Point, Ga., as superintendent of that mill. Mr. Boodie has already gone to East Point and has assumed charge of the mill there. H. B. Boddie, acting superintendent, is in charge of the mill. Every effort is being made to have the affairs of the mill in such shape that it may be closed at noon Saturday. The mill is running night and day at present. Mr. Boddie could not say when the mill would be reopened. The order was for an indefinite suspension of operations and plans are being made accordingly.

Spectrum Club Formed in Chicago.

An organization known as the Spectrum Club has been formed by members of the dyestuff fraternity in Chicago. It is intended that it shall follow more or less the lines of the Drysalters' club in Boston and its membership is composed entirely of salesmen and managers of concerns handling dyestuff, both manufacturers and jobbers. The present membership it about thirty but it is expected that by the opening of the Fall saeson this will be considerably increased.

Practical Discussions By Practical Men

Roving Traverse Motion.

Editor:

What is the best way to prevent the back-lashing or play in the motion of the roving traverse rod?

Second Hand.

More Yarn on Bobbins.

Editor:

What is the best means to employ to get more yarn on the bobbins when spinning warp yarn on a filling wind motion? Spinner.

About Rayon.

Editor:

I wish you would have some of your readers to explain to me how to find the weight of cloth filled with rayon.

The construction is 64x58 32-inch, 28s warp 150 denier rayon, size is about 10 per cent on warp.

X. Y. X.

Improves Spinning Operation.

Editor:

Is there any way to improve the operation of a spinning frame right after doffing. The rail goes so high that the ends snap. And the rail goes so low that the ends balloon. There is so much to do right after doffing, that if extra ends break the spinners get behind. What is the remedy. Second Hand.

Answer to Southern.

Editor:

In answer to Southern, will say that if he will reverse the action of the rolls and put the pile rolls where the counter pile rolls are and vice versa, and put on a larger pulley which actuates these rolls, and then experiment with the various settings, he will find that he can produce good napping on his felters, and also have quite a number of extra nappers at his disposal with which to increase the output of his department. Expert.

Answer to A. R. A.

Editor:

In answer to the inquiry by A. R. A. let me say that it is possible to run odd picks on a 4x1 loom. It is done in this manner. When you desire to put in the odd pick, run the shuttle across in an open shed to the single side as usual, then drop all the harness and run the shuttle over the top of the cloth to the double end. This leaves one pick in the cloth and one loose lick floating on top. When this color is to be used again for an odd number of picks, run the shuttle across the face of the cloth with all harness lowered to the single end. This takes up the loose filling that was left on the last odd pick. Then open the shed and run the shuttle back into the double end again. The desired effect has now been obtained and no filling wasted.

I hope this will answer the question. J. A. T.

Answer to Spinner.

Editor:

The life of a belt on a spinning frame depends upon several different items which must be taken into consideration, as follows:

1. The pulley size.
2. The speed.
3. The width of the belt.
4. The thickness of the belt.
5. The quality of the belt.
6. The kind of belting.
7. The kind of goods made.
8. The care of the belting.

You can see that all of these things make a difference with the life of a belt. There are many kinds of belting. Today we have in the market belting made of leather, cotton yarn, cotton cloth, yarn and rubber, cloth and rubber, all rubber, linen yarn, linen cloth, etc.

Even leather belting varies a great deal. It varies in thickness and in quality.

Again the care of belting counts for much. A second hand once asked the overseer for a new belt. The overseer examined the belt which seemed too good to cast away. Said he: "Let's patch this belt a little and see how much longer it will run anyway?" How much longer do you think this belt remained in use? Well, to tell the truth, it did good work for three years more—after a new one was wanted but not secured. How is that? The life of a belt is quite an unknown quantity.

Master Mechanic.

Contracts for $500,000 Worth of Rayon Hosiery.

Nashville, Tenn.—The Hartford Hosiery Mills of Nashville has closed a contract calling for delivery of 120,000 dozen pairs of rayon hosiery within 12 months, according to announcement by the company . This is thought to be a record order for a Southern mill, amounting to about $500,000. All of the material for the hosiery is to be manufactured by the rayon plant of Du Pont Rayon Co. at Old Hickory.

Analyzes Market Condition

The present situation in the yarn market offers spinners an excellent opportunity to cooperate to improve market conditions, according to J. F. Taylor, president of the Kinston Cotton Mills, Kinston, N. C. In a letter to the Southern Yarn Spinners Association at Charlotte, which was made public by C. S. Green, secretary, Mr. Taylor outlines the possibilities for concerted action by the mills.

The letter, which has been sent to all members of the Association, says:

"We do not think an opportunity has ever been offered yarn spinners for influencing the market as present itself just at the moment. The cotton situation, the yarn situation, stocks in the hands of the jobbers and retailers, are such that by concert of action they can in the next six or eight weeks bring about a very great change in conditions. Those spinners who have but little cotton should certainly not bull the market for what little there is left unsold, and those who may have more than orders require, should either sell it or hold it for use later. Spinners have for several months kept the market supplied with little lots on consignment or at the mill so that the buyer could come in and get the minimum quantity almost any day and almost at his own price, while nearly all of us have been quoting small, medium and larger quantities for later delivery, based upon lower prices for cotton, which some of us expected to see prevail after the crops are under good movement. The future course of the market will of course be unknown for some time, as both drouth and boll weevil are yet likely to do great damage, putting price of cotton higher. At the same time a little rain in certain sections, and a good shower in others might improve the conditions so that we may see lower prices.

"The price of cotton however, is not what we should have so much in mind at the present as we know very well we cannot control it, and anyone's guess is about as good as another's, so speculation should not be entered into, but the situations that we must control is to refrain from taking orders or delivering anything from stock, the next six weeks that does not bear a profit on replacement cost at the time of the sale, nor to use a bale of cotton to make up stock yarn or orders that do not bear a satisfactory profit on market prices for cotton and cost of manufacturing at the time of sale. Such action will practically stop sales except in very small hand to mouth way, which we believe will be large enough to almost completely absorb the stock now in the leading yarn markets. By all means we should not consign another pound of yarn to those markets, as every package we sell will operate against us for a full twelve months to follow and surely we do not wish to see another twelve months such as we have had for the last two or three years.

"We realize that every manufacturer's situation is different; some feel that they are compelled to run to take care of their help; some are situated so that they do not have to take care of their help, but whatever the little sacrifice may be, it is well worth making, for no opportunity has ever presented itself to us before to accomplish so much now There is no reasonable sacrifice that we could make in the next six or eight weeks that would not pay us 100 per cent in the following four months, and we are presenting this appeal hoping that the situation may be fully realized by every spinner of yarn for the market, and that this action will be taken by everyone receiving this most earnest appeal for self preservation."

Silk and Cotton Crepes Outstanding for Fall and Spring

Silk and cotton crepes featuring adaption of silk designs carried out in unusual color combinations will be featured in coming fall and spring collections. Many of the designs are geometricals, and broken stripe effects coming as a close second.

This fabric will not only be shown in printed effect but in solid colors as well, such as pencil blue, tan, cream, bois de rose, navy, white, black, and browns.

Novelty ginghams and crash suitings are exploited to a considerable extent in the housedress field.

The 54-inch borders revealing florals and geometricals arranged in decidedly pleasing variations, many of them lending themselves to the development of the flared silhouette are also of outstanding importance. Voiles, crepes, and rayons are the backgrounds most frequently employed. Floral treatments are predominant on the voiles and crepes, while stripes, plaids and checked effects seem to be favored on the rayon mixtures.

Rayon alpacas are being much discused at the present time. It seems that they can now be obtained at about half the price originally asked at the beginning of the season. A number of manufacturers and converters have voiced the opinion that it is being killed almost from the start because of that fact. Up to now only stripes and plaids have been featured on this fabric.

However, all indications seem to point to a bigger silk and crepe season. This is attributed to its great resemblance to silk, and the adaptation of silk patterns which makes it very difficult to discern the difference unless closely examined.—Daily New Record.

French Silk Stocks Low.

Nearly all the supply of raw silk available for immediate delivery held by Lyon merchants has been disposed of and in some cases manfacturers find it difficult to keep up their assortment of stock, Consul H. H. Watson, Lyon, advises the Department of Commerce. The demand, however, for silk for future delivery is small in spite of the prospects for a reduced European crop.

SOUTHERN TEXTILE BULLETIN

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JUNIUS M. SMITH ..... *Business Manager*

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Your Corner

ONE of the great evangelists has a song that his congregation always sings better than any other song.

It is a song that not only has rhythm but has a personal appeal to every man and woman, for its title is "Right in the Corner Where You Are."

The song carries the suggestion that a man can play his part in life, and do things worth while, right in his own little corner and that it is not necessary to seek other fields of usefulness in order to be satisfied.

Cartoonists, usually, try to amuse people and it is seldom that a worth while lesson is interwoven with their humor, but in the pictures printed upon this page, Briggs, the well known cartoonist, has carried into his cartoon a lesson which is close kin to the implied meaning of the great song, "Right in the Corner Where You Are."

Mr. Briggs chose for his subject an occupation that is usually looked down upon especially when the work is done by a grown man.

Pete is a bootblack but comes home feeling good because he has had a big afternoon's business.

He is filled with pride because he believes he gives the best shine in the shop and he shows his wife how expert he is in handling the shine rags.

He explains that because of his business shrewdness he has found a better polish than any of the other bootblacks and he is proud of the fact that he gives by far the best shines.

Pete might have come home, as many Petes do, in real life, and sulked and moped because he was only a bootblack whereas other men were cotton mill superintendents, merchants or bankers.

He might have cried out against what he thought to be the better fortune of other men, but Pete, the bootblack, came home swelled with pride because "Right in His Corner" he had made money for his wife and children and he was putting it all over the others in his particular line of business.

Pete was not crying because he was shining shoes while some other man was sitting at a bank president's desk.

He was making good and was obtaining intense satisfaction from his success.

No man should be without ambition, especially the ambition to succeed in his chosen business, but there are too many who fail to succeed, where they are, because they have illusions about the happiness of men in other lines of business.

Among the section men in any large spinning room, there is usually one who is regarded as superior to the others.

In any weave room there is usually one loom fixer who stands out as the best of the lot.

Such men know that they can do their work better and with less effort than the other and they have a sense of happiness in their superior efficiency.

They have, of course, an ambition to rise higher in the mill and eventually become superintendents, but in their present corner they derive much satisfaction from their recognized position of superiority.

Striving to be the best of those in your corner while waiting for an advancement is far better than sulking and croaking about those individuals who are imagined to have an easier path in life.

Pete, the bootblack, as characterized by Briggs, portrays a great lesson.

The 1920 Scale

A DISPATCH from Fall River, Mass. says:

Restoration of the 1920 wage schedule in cotton and woolen textile plants here will be sought by the United Textile Workers of America.

We rise to state that if they will help the mills get back to the 1920 prices we do not think there will be any objection to restoring the 1920 wages.

It has been a long time since we have heard anything from our old friend, Thomas Failure McMahon, but we understand that Harry Etaugh is still with us in the South and that he has recently been trying to organize a union among the full-fashioned hosiery machine operators.

If there were just three cotton mill operatives in the South we doubt if Harry Etaugh could organize them in three years. Harry is a harmless kind of fellow, who seems to be able to draw a steady salary without doing any steady work.

Road Bonds

IN a recent editorial the Columbia, (S. C.) Record says of their road building program:

"The roads will be paid for," and that is "a thing some other States may not boast of, for many of them have issued bonds which will keep future generations busy paying for many years to come."

Good roads are absolutely necessary to welfare and progress and it is peculiar that the people of Georgia, South Carolina and Virginia, which States are on the "Pay as you go" system cannot understand that the bond system as operated in North Carolina is not a burden upon the present population or future generations.

There is not one cent of property or business tax levied for State roads in North Carolina.

There is a 4 cent gasoline tax, but because of the good roads, the motorist saves enough gasoline to more than pay the gasoline tax.

There is an automobile tax of about $20 per car, but good roads in North Carolina save motorists at least five times that amount in wear and repairs.

The only man who contributes anything to the expense of building the highways in North Carolina is the man who drives a car and he pays in proportion to the amount that he drives, that is, in proportion to the gasoline he uses.

The gasoline tax in North Carolina is enough to maintain the roads and provide a sinking fund for the retirement of the bonds.

The idea of the Columbia Record, that a future generation will have to pay for North Carolina roads is silly. The present generation will enjoy the roads while paying taxes which amount to less than the roads save for them.

As the sinking fund retires the bonds they will not be in existance for the fuutre generation to pay.

Georgia, South Carolina and Virginia have the "Pay as you Go." system and they certainly "pay as they go" for every trip requires a unnecessary amount of gasoline and unnecessary wear upon the car.

We can leave Charlotte and go ti Raleigh on a beautiful hard-surface road with no dust, but the dust in a recent trip from Anderson to Spartanburg almost ruined a suit of clothes.

The North Carolina plan is far ahead of the others and there will be no road bonds for posterity to pay.

Money Lost on Oil Wells

ACCORDING to a statistical bulletin issued by the American Research Foundation here:

"Drilling oil wells has cost $12,000,000,000 since the beginning of the oil industry," says the bulletin, "and all the oil ever recovered has brought the producers only $7,500,000,000. Eighty per cent of wells drilled in wildcat territory never struck oil.

"Dry holes for the last few years have resulted in an average loss to operator of $90,000,000 a year."

In spite of the above record any slick salesman can sell oil stock in any town in the United States. People imagine that oil wells have made money whereas the public has sunk billions in them.

Announcing A New Method Of Producing Bleach Liquors

WHEN our technical staff first attacked the problem of absorbing Liquid Chlorine to produce bleach liquors, there was available only the old-fashioned tower system. We first suggested the desirability of using the refrigerative effect caused by the vaporization of the Liquid Chlorine by means of our evaporating coil now in successful use in more than a score of paper mills and several large textile mills.

The development announced herewith has been brought about by our realization of the need for a method allowing more rapid absorption and more flexible utilization of existing bleach house equipment. The accompanying cut shows the construction of the chlorine absorber and its location in the chlorinating system. This new equipment possesses the following advantages:

Simplicity **in construction and operation are secured by the fact that the vaporization of the Liquid Chlorine and its subsequent absorption by the milk of lime solution is entirely effected within the chlorine absorber. In connection with the unit batch system with the ton container as the base for the desired batch, it furnishes foolproof operation with any grade of operating labor.**

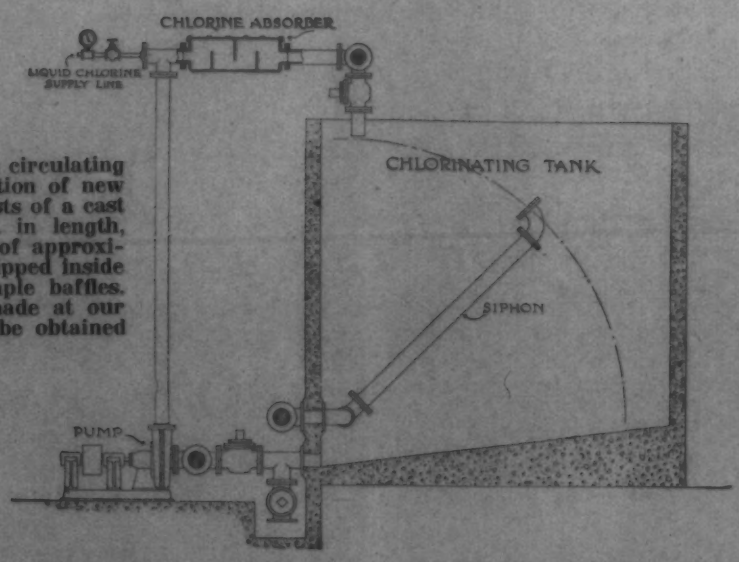
Refrigerative Effect **of vaporization is utilized even to better advantage than with the coil, since it is localized just where the heat of reaction of the combination of the chlorine and the lime is momentarily concentrated.**

Rapidity of Absorption **is such that chlorination can proceed at the rate of 2,000 pounds of chlorine per hour or better, depending on the capacity of the circulating pump. The advantage of this speed for large operations is evident.**

Flexibility **is a prime feature of this method, in that a single "chlorine absorber" can be used to successively chlorinate any number of tanks.**

Accurate Control **of the liquor, when the unit batch system is not used, is assured by the fact that liquor is available for testing at the exact point of chlorination.**

Few textile mills require such rapidity of absorption as is possible by this new method. This is but one of many Mathieson developments, however, in the manufacture, transportation and use of Liquid Chlorine, all of which accrue primarily to the benefit of our customers. Because consumers appreciate this fact, the Mathieson Company is today the largest shipper of Liquid Chlorine in the United States.



Chlorinating tank and circulating system, showing location of new absorber. This consists of a cast iron box about 2 ft. in length, with a cross-section of approximately 10″ x 10″, equipped inside with a series of simple baffles. This equipment is made at our own plant and may be obtained direct from us.

The MATHIESON ALKALI WORKS, *Inc.*

250 PARK AVE. NEW YORK CITY

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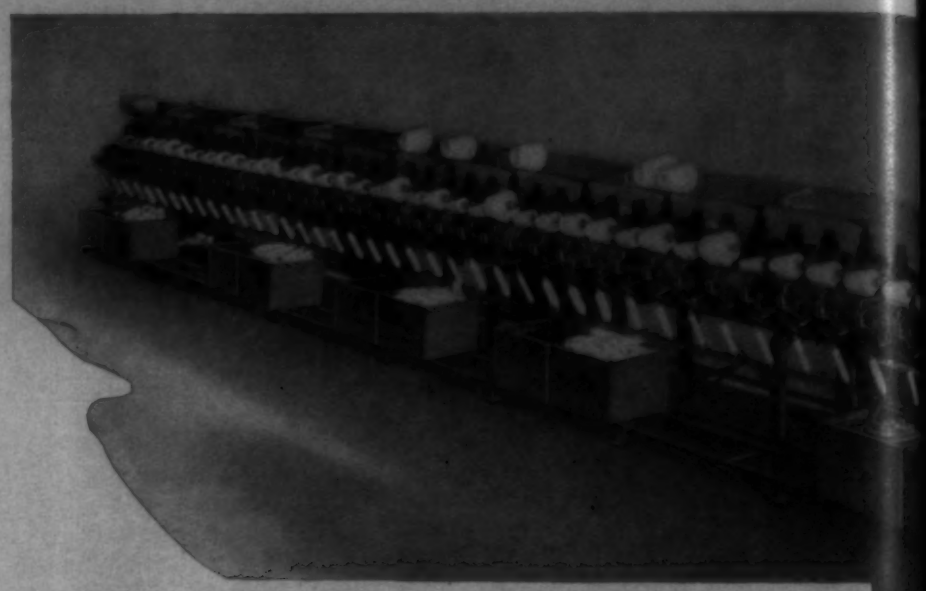


The Universal No. 60-GF Cone and Tube Winder

In the present era of keen competition, manufacturers of textiles find it necessary to employ all known means of reducing costs without sacrificing quality.

The latest contribution to quality production and cost reduction is the Universal Winding Company's No. 60-GF Machine for winding "Uniform" Cones and Tubes.

HIGH PRODUCTION—LOW OPERATING COST

This latest type of cone winder has been designed with special reference to high speed winding combined with simplicity of structure and ease of handling. The reduction of friction through the use of selected ball bearings for the main shafts more than offsets the additional power required for high speed winding, as well as securing greater durability of working parts of the machine: it requires less than 3 h.p. to operate a machine of 98 spindles at a yarn speed of from 450 to 600 yards per minute.

While this machine embodies the high standard of structure for which this company's product is noted, it is so simplified as to make the first cost moderate and thus increase its economic value to the textile industry. While friction winding machines of general construction have been for many years in use, the product has been variable in quality owing to the difficulty of controlling the proper form of the package. In the No. 60-GF machine, principles of construction are embodied which insure uniformity of cone or tube and produce packages which are unequaled by the product of any friction driven machine previously constructed. These principles of operation embodied in this machine are protected by letters patent and are fundamental in securing uniformity and perfection of product.

We present this machine for the consideration of textile manufacturers with the utmost confidence on the score of quality of product, high production, simplicity of operation and durability in service.

Floor Space Required for 98 spindles, 43′—11″ x 3′—10″

UNIVERSAL WINDING

"Uniform" Products of the Universal No. 60-GF Winding Machine

"Uniform" Cones are built with an accelerated motion to increase the taper of the package as it builds, making the ideal supply for knitting machines.

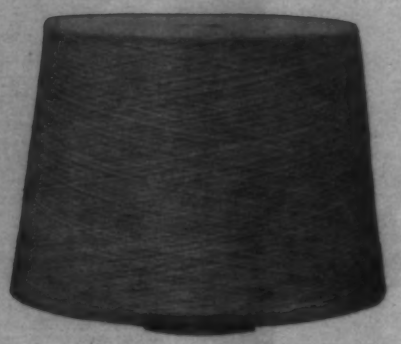
"Uniform" Cones for high speed warping are wound on wood containers.

"Uniform" Tubes are wound for shipping purposes on 5-8" paper tubes.

All "Uniform" packages built with constant yarn speed and uniform tension are not only attractive in appearance, but afford the best possible delivery in mill practice.

"UNIFORM" HOSIERY CONE

6" traverse, maximum diameter 8", net weight of yarn up to 3 pounds.



"UNIFORM" WARPING CONE

6" traverse, maximum diameter 8", net weight of yarn up to 4½ pounds.

"UNIFORM" TUBE FOR SHIPPING PURPOSES

6" traverse, maximum diameter 8", net weight of yarn up to 4½ pounds.

UNIVERSAL WINDING COMPANY

Providence, New York, Chicago, **BOSTON** Philadelphia, Charlotte, Utica,

Montreal and Hamilton, Canada

DEPOTS AND OFFICES AT MANCHESTER AND PARIS

Personal News

A. F. MacIntyre has been appointed agent of the Maginnis Mills, New Orleans, La.

J. M. Batson has been appointed general manager of the Lavonia (Ga.) Cotton Mills.

O. C. Bagwell has been appointed overseer spinning at the Dixie Mills, LaGrange, Ga.

David Asbury has been appointed superintendent of the Hillside Mills, LaGrange, Ga.

Tom Brown has accepted a position in the machine shop of the Odympia Mills, Columbia, S. C.

Elkin D. Rice, formerly of Spartanburg, S. C., is now located at Greenwood, S. C.

W. H. Suttenfield has been elected secretary and treasurer of the Superior Yarn Mills, East Monbo, N. C.

O. E. Stevens has resigned as superintendent of the Lullwater Manufacturing company, East Point, Ga.

Lewis N. Puler, of the Aragon Mill, Rock Hill, S. C., has become overseer spinning at the Victoria Mill No. 2, of the same place.

L. L. Blackwell has resigned his position with the Wade Manufacturing Company, Wadesboro, N. C., and is now located at Concord, N. C.

J. A. Norris has resigned his position with the Loray plant of the Manville-Jenckes Company, Gastonia, N. C., and moved to Williamston, S. C.

J. B. Hall has resigned as secretary and treasurer of the Superior Yarn Mills, East Monbo, N. C., and will probably enter the cotton business.

John Blackman has been promoted from superintendent of the Hillside Mills, LaGrange, Ga., to the New York office of the Callaway Mills.

S. M. Thrower has resigned as overseer spinning at the Dixie Mills, LaGrange Ga., and accepted position in the twister room of the Stark Mills, Hogansville, Ga.

Grady S. Kennington, formerly with the Hillside Belting & Supply Co., LaGrange, Ga., has become general manager of the Valley Mills, of the same place.

W. A. Ball has resigned as superintendent of the Catawba Knitting Company, Rock Hill, S. C., and accepted a similar position at the Standard Hosiery Mills, Burlington, N. C.

O. S. Brock has been promoted from overseer carding and spinning to superintendent of the rug department of the Valley Mills, LaGrange, Ga.

H. H. Boyd, who recently retired as general superintendent of the Chadwick-Hoskins Mills, is spending the summer with his daughter at Newbern, N. C.

D. H. O'Neil, of the cotton firm of Wm. H. Britton & Co., Memphis, Tenn., is doing research work in cotton in the Pacific Mills, Columbia, S. C.

B. J. Boddie has been transferred from superintendent of the Greenville plant of the Lullwater Manufacturing Company, to a similar position at the Lullwater plant at East Point, Ga.

R. H. Adams who has charge of testing department of the Callaway Mills, LaGrange, Ga., has been awarded two certificates from the North Carolina State College of Agriculture and Engineering at Raleigh, N. C.

J. R. Badger, formerly of the Judson Mills, Greenville, S. C., has been appointed assistant district manager for L. Sonneborn Sons Inc., of New York. J. C. Duckworth, of Greenville is district manager. Mr. Badger will travel South Carolina.

Rankin Mills
Gastonia, N. C.

W. A. Marley	Supt.
J. J. Grayson	Carder
E. R. Holden	Spinner
T. E. Bean	Master Mechanic
Night	
J. H. McCall	Carder
F. F. Ritch	Spinner

Pinkney Mills
Gastonia, N. C.

W. A. Marley	Supt.
W. L. Ballerd	Carder
F. C. Mosteller	Spinner
T. E. Bean	Master Mechanic
Night	
G. C. Childers	Carder
J. E. Hoyle	Spinner

Ranlo Manufacturing Co.
Ranlo, S. C.

J. A. McFalls	Supt.
Z. G. Holtzclaw	Carder
Z. G. Holtsclaw	Spinner
O. G. Paysour	Twisting
O. G. Paysour	Weaving
J. M. Norris	Master Mechanic
Night	
J. D. Harriosn	Carder
C. L. Biddy	Spinner
W. M. McPherson	Twister

J. M. L. Bell, Laboratory and shipping clerk.

Borden Mills, Inc.
Kingsport, Tenn.

Geo. H. Hughes	Supt.
C. C. Holmes	Asst. Supt.
Robert Dellinger	Carder
T. R. Morton	Spinner
W. S. Porter	Weaving
W. S. Porter	Cloth Room

MILL NEWS ITEMS OF INTEREST

Columbus, Miss.—The Tombigee Cotton Mills are replacing their plain looms with Nordray 16 harness, dobby looms.

Flat Rock, N. C.—The Chipman-Burrows Hosiery Mill Company, has been incorporated with a capital stock of $200,000 by Alfred W. Wheeler and associates.

Landis, N. C.—The Corriher Mills have placed contract with the Fairbanks, Morse & Co. for 725 h.p. of individual ball bearing motors to drive the machinery being installed in their new mill.

Shannon, Ga.—The Brighton Mills have let contract to the Bahnson Company, Winston-Salem, N. C., for installation of humidifying equipment in their new Southern plant here.

Rossville, Ga. — The Peerless Woolen Mills expect to let contract within three weeks for an additional mill to be 140x160 feet, brick and concrete construction. They will install 7,500 spindles and 100 broad looms.

Rhodhiss, N. C.—The Rhodhiss Mills No. 1 are replacing their plain looms with Nordray automatic, this is the fourth installment of this mill of looms supplied by the Hopedale Manufacturing Company.

Bemis, Tenn.—The Bemis Brothers Bag Company, St. Louis and Boston are installing 300 Nordray looms, made by the Hopedale Manufacturing Company, in their mill here.

Hendersonville, N. C.—The Balfour Mills have purchased machinery for the addition of 5,000 spindles and 1,000 high speed Nordray looms. Additional floor space will not be required as this addition was contemplated when the mill was built. 25 new houses will be added to the village to take care of the increased number of operatives. J. E. Sirrine & Co., Greenville, S. C., are preparing the plans.

Shannon, Ga.—The Brighton Mills let the following contracts for their Southern plant: Air conditioning system to Bahnson Company, Winston-Salem, N. C.;fire protection, Grinnell Company, Charlotte, N. C.; Elevators, Park Manufacturing Company; Boilers, R. D. Coles Manufac-Company; Chimney, Alphonse Custodis Company, Atlanta; Sewerage and water works systems, resevior, filter plant, pumping plant and sewerage disposal plant, Fiske-Carter Construction Company, Greenville, S. C., who also have the general contract for construction of the mill buildings and village houses. J. E. Sirrine & Co., Greenville, S. C., are the Engineers on this work.

Hawkinsiville, Ga.—The Cochran Cotton Mills plant here has purchased from Fairbanks, Morse & Co., twenty-five 1½ h.p. 12,000 r. p. m. ball bearing totally enclosed loom motors for application to Stafford looms.

Jackson, Ga.—The Pepperton Cotton Mills have purchased complete equipment from Fairbanks, Morse & Co., for the electrification of their mill, including 750 horse power of ball bearing textile motors.

Johnson City, Tenn.—The Charlotte office of Lockwood, Greene & Co., architects and engineers, has been commissioned to draw plans for the plant of the American Bemberg Corporation, a $17,000,000 enterprise recently formed in New York City for the purpose of manufacturing artificial silk from cotton linters, as announced last week.

Construction of the plant at Johnston City will represent an outlay of several millions of dollars, it was stated. It will employ between 5,000 and 6,000 people when in operation. Construction work will begin as soon as plans can be drawn and the contract let for the work.

The corporation has purchased 1,200 acres of land between Johnston City and Elizabethton, Tenn., on the Wautauga River, from which source of supply the water used in the plant will be drawn. Approximately five millions of gallons a day will be used. Another water supply will be at Hampton, five miles from the plant.

Clinton, Tenn.—Magnet Knitting Mills, with plants at Clinton and Coal Creek, awarded the contract for the construction of their new building to Brown-Harry Construction Company, of Gastonia, N. C. The new structure will be an addition to the plant here, and will be used for manufacturing full fashioned hosiery. It will be 96x230 feet, 2 stories in height and of reinforced concrete. J. E. Sirrine & Co., of Greenville, S. C., are the Engineers.

Durham, N. C.—In addition to the general contract for the erection of a mill building, awarded several weeks ago to N. Underwood of Durham, other contracts have been awarded by the Yarbrough Mills, Inc., as follows: Sprinkler system, Rockwood Sprinkler Co., Chicago; humidifiers, American Moistening Co., and preparatory machinery, Saco-Lowell Shops, both of Boston; wiring, Huntington & Guerry, Greenville, S. C.; looms, Crompton & Knowles, and finishing machinery, Curtis & Marble Co., both of Worcester, Mass.

The building will be of brick to the windows, with steel sash, full daylight construction, monitor top and concrete foundation. Machinery will be electrically driven, with individual motors for each loom. The plant will be ready for operation about October 1.

Tulsa, Okla.—According to C. R. Miller, of the C. R. Miller Maunfacturing Company, which recently purchased the Sand Springs Cotton Mills at Sand Springs, the plant will be running in three weeks and the proposed bleachery can be put up in about 60 days. Plans for the bleachery call for a capital stock of $1,000,000, and the Tulsa Chamber of Commerce, in conjunction with Albert Feldman, financial representative of the Miller company, are organizing a stock selling campaign to raise $300,000 of this amount When the bleachery is completed, the Sand Springs Cotton Mills will operate entirely on colored goods, according to a recent announcement by Mr. Miller.

Winston-Salem, N. C.—The Hanes Dye and Finishing Company located on Buxton street, is expected to begin operations soon. The firm which is composed of H. G. Chatham, president; J. G. Hanes, vice-president; Ralph P. Hanes, secretary-trasurer, and Herman A. Jolitz, manager, will commence operation about August 15. The building has been completed and the installation of the machinery is in the process of completion.

The equipment was supplied by

the Textile Finishing Machinery Company, of Providence, R. I.

Ralph P. Hanes, secretary and treasurer of the firm, states that "due to the system of continous processing which enables us to put out approximately 1,000,000 yards a week, we do not have to employ but 45 men at the present time. All of the work in the mill is done by machinery and a piece of cloth can be started at the receiving door which is located at the lower end of the building and run through to the front section of the mill. There is practically no work to be done in the mill except by machinery." Herman A. Jolitz, manager of the mill, ha shad 35 years' experience in the industry, being manager and superintendent of several of the largest plants in the United States. He served his apprenticeship with the Windsor Print Works of North Adams, Mass. In 1894 M. Jolitz together with three other men, started the Mount Hope Finishing Co., of North Dighton, Mass. Mr. Jolitz was later connected with the following firms: Manatica Dye Works, Millville, N. J.; Bellman Brook Bleachery Co., Fairfield, N. J.; Utical Willowvale Bleaching Co., Chadwicks, N. Y.; Yadkin Finishing Co., Salisbury, N. C.; Maumee Finishing Co., Toledo, and the Hanes Dye and Finishing Co., where he is now located.

Gaston Mills Have Small Stock.

Gastonia, N. C.—Southern Mill Rules for 1925, relating to cotton buying, were unanimously taken by Gaston county spinners at a meeting held for the purpose Saturday night. Representatives of over one million spindles will place the new rules in effect for the new crop year.

A stock survey announced Saturday shows only 260,000 pounds of fine combed yarns in counts above forties held in stocks by a million spindles.

College to Have New Textile Teachers

Raleigh, N. C.—Dean Thomas Nelson, of the State College Textile School, announced the employment of two new teachers who will come to the college at the beginning of the fall term. I. Molyneaux has been elected associate professor of textile designing, and A. H. Grimshaw has accepted the appointmnt as associate professor of dyeing.

Professor Molyneaux holds degrees from the Manchester Technical School and the Bolton Textile School, both in England. He is also the holder of medals, offered by the city and guilds of London, which were won in competition in design with textile experts from all parts of the United Kingdom. Professor Molyneaux is considered one of the leading authorities on textile design and color. Until a few months ago he was employed for special work by the Mexican Government, with headquarters in Mexico City.

Professor Grimshaw is a graduate of the New Bedford (Massachusetts) Textile School, and for several years has taught textile chemistry and designing in this institution. In addition to his teaching duties he has also engaged extensively in research had considerable experience in commercial dyestuff laboratories, which work along these lines, and he has especially fits him for the position in the Textile School.

Davenport Mills Issue Color Chart

The first color chart of the Davenport Hosiery Mills, of Chattanooga has been issued to the trade, containing 36 shades for summer and fall, besides, black, navy and white. Although the colors ar presented on special process embossing, the sheen and lustre of the genuine silk is not shown, and the company to explain this, in its salesmen's bulletin stated that:

"This color card has been made by a special process and accurately produces our colors. You will appreciate the fact that it is impossible to bring out the sheen and lustre of our stockings on a color card of this type. However, this color card gives a faithful and accurate reproduction of all our shades."

On the color card, it is stated that the colors are up-to-date interpretations of shades shown in Paris and New York and will be augmented from time to time by new colors.

The new colors are:—Atmosphere, chaire (flesh), alouett (sky lark), nude, skin, dawn, French nude, priscilla (gray), oriental, stone gray (jack rabbit), sudan (beige), grain, blonde satin, shell, bennt (almee), strawberry (fraise), sandalwood, harvest, windstorm, calf (light calf), madrid (cocoa), cordovan, evening silver, mauve, gold, amber, maize, apple grreen, cardinal red, canary, yellow, cobalt blue, wisteria (orchid), peach, rose beige ,maple cream, and salmon (light mandarin).

June Hosiery Production Drops Slightly Below that for May

Washington, Aug. 6.—According to statistics made public today by the Bureau of Census, Department of Commerce, showing hosiery production for 313 indentical establishments during May and June, in dozen pairs, there was a slight decline during June as compared with May, the figures being 4,719,616 and 4,813,179 respectively.

Ttotal production for June, based on reports from 318 establishments representing 401 mills, 36 of which reported no production during the month, was 4,719,671 dozen pairs, all classes. Of the total production, in dozen pairs, 58,103 were men's full fashioned; 1,586,073, men's seamless; 810,763, women's full fashioned; 1,306,376, women's seamless; 495,634, boys' and misses' all styles; 394,875 children's and infants', all styles, and 67,847, athletic and sports, all styles.

Orders and stocks for June, in dozen pairs, were as follows: Shipments during month, 4,885,066; finished product on hand at end of month, 8,010,214; orders booked during month, 4,960,776; cancellations received during month, 308,223; unfilled orders on hand end of month, 9,582,095.

A New Film Creation.

An attractive little booklet "A New Film Creation", has recently been issued by E. F. Houghton & Co., Philadelphia. It gives some very interesting and valuable information relative to lubrication. The booklet is an adaption of an advertisement by Chas. E. Carpenter, president of E. F. Houghton & Co., and will be interesting to any mill man. Copies may be had by addressing the company.

Cotton Cloth Prospect

(Continued from Page 14)

of the Government on the report that causes the mischief they say.

One very large factor in the cloth markets believes that if the Government issued its reports weekly, say every Monday morning, it would not be long before the different estimates would cease to have an effect upon cloth sales. As matters stand, many leading manufacturers and merchants are already to enter upon any plan that will bring the whole matter again before Congress to the end that the effects of Government work upon the trade will be less serious.

Important Merchandise Changes.

Some very important merchandising changes affecting future cotton goods distribution are under way. Large selling agencies, some of them with on experience of three quarters of a century behind them, are reorganizing their sales and mill-directing forces to handle more styled cotton efficiently, and to go more deeply into the creation of new fabrics. This action is being forced by the continued demand for novelties in dress wear, as well as by the increasing sales opportunities for goods not of a strictly staple character Hitherto a large part of this research work has been done almost exclusively by converters, designers, or artists beyond the control of mill, or by workers in the employ of different institutions using cotton goods for a variety of new purposes. This change entails added costs, but it seems to be easy to distribute them in the distributing end of the cotton goods industry.

At the moment, merchants are relying upon several patent factors that will bring about a better volume of business for the coming six months. With average crop yields now in sight and good prices possible for them 40 per cent of the purchasing power of the country, that in agricultural regions, bids fair to be in good condition to buy regularly. Stocks of goods in mill and jobbers' hands are less than a year ago, while there is little in sight to indicateany great lessening of ultimate consumer demand. The belief obtains among merchants that general industrial conditions will certainly be no worse than they have been, so they do not see anything to make them think that a lessened general consumption will be noted in non-agricultural sctions.

It is needless to add that cotton at 25 cents will not be as attractive to merchants or manufacturers as cotton at 20 cents a pound. They feel that silk, wool and other things have cut into cotton goods consumption largely because of the high price of the cotton, and not wholly because of an expended purchasing power among consumers that has gone style mad.—Journal of Commerce.

Constantinople Carpet and Rug Maret Reported.

Important shipments of Persian carpets and rugs continued to arrive on the Contantinople market during May, according to Trade Commissioner J. E. Gillespie, Constantinople. Sales in this class of goods, however, were not so large and considerable stocks accumulated.

Cotton Mill Processes and Calculations

(Continued from Page 17)

This class constitutes the largest proportion of all the world's cotton.

It is claimed that yarn made from 7/8 to 1 inch staples, properly combed, is as even and smooth as that made from 1¼ to 1½ inch staple not combed.

CHAPTER V.

DRAWING.

63. Following the stock through the mill in logical sequence twenty years ago the railway head would have come before drawing. Cards formerly delivered sliver into a railway head trough which carried 8 to 12 slivers together to the railway head, where they were consolidated, drawn out, and delivered by the coiler into a can. Railway heads were later made to receive sliver from cans, in the same manner as drawing frames. This machine still served a good purpose in equalizing imperfect carding, until the more recent and perfect cards were introduced. Now, however, the sliver from the best revolving top flat card is as regular in weight before passing through a railway head as after. As an outgrowth of the railway head we have a machine known as the evener drawing frame, which will be described more in detail in the next chapter.

The drawing frame was also used in connection with the railway head as a process immediately following it. One process of drawing in addition to railway head was formerly considered sufficient; but afterwards two processes proved superior, and finally three processes of drawing without railway head came to be the standard practice. In mills not using combers the drawing usually follows the carding.

64. When the sliver leaves the card, the fibres of cotton have been laid approximately parallel; but, owing to a natural tendency to curl and twist, the fibres stand out in many directions, and are considerably entangled with one another. It is the purpose of the drawing frame to stretch some of the curl out of the fibres, and to finish the process of parallelizing, and to even up irregularities by the process of doubling and drawing out referred to in (14.)

We have seen that the card delivers its product in the shape of a sliver coiled in a can. These cans are taken to the drawing frame and arranged so that several slivers may be fed between one set of drawing rolls. From 4 to 7 (usually 6) card slivers are fed together between rolls and drawn into one. This constitutes one "delivery" of drawing. One frame or "head" is built to contain 4 to 6 deliveries. The slivers fed to the machines are referred to as "ends," and the machine is described as having 4, 5, or 6 "ends up." A machine of 5 deliveries with 6 "ends up" will take its stock from 30 cans of card sliver and deliver "drawn sliver" into 5 cans. Fig. 17 is a diagram showing how stock passes through a drawing frame. Like all the other illustrative diagrams, it is designed not to show the exact mechanism, but to illustrate the purpose for which the machine is made. It represents the action of one "delivery," in a frame having 6 ends up.

Drawing Frame, Fig. 17.—LETTERING.

A. Cans of Card Sliver.
B. Slivers being fed.
C. Separating Fingers.
D. Sliver Spoon.
F. Part of Stop Motion.

K. Bottom Fluted "Front Roll," usually 1⅜ in. diameter.
G, H, J. Bottom Fluted Rolls, usually 1⅛ in. diameter.
G′, H′, J′, K′. Top Rolls, 1⅛ in. diameter.
L. Cover Plate.
M. Trumpet.
N. Coiler Head.
P. Calender Rolls.
R. Trumpet Stop Motion.
S. Stirrups.
T. Weights hanging on top rolls.
Q. Can for receiving drawn sliver.

Drawing Frame.—PROCESS.

Card slivers B, B, (4 to 7, according to the "ends up," usually 6), are laid up, each one in its own division of the plate C, that is, between the "fingers." Each one then passes over its own spoon D.

They all pass together between the bottom and top rolls. The top rolls are held down on the sliver by weights hung with stirrups, as shown. The weights are usually 22 pounds for front roll, 20, 20 and 18, respectively, for the third, second and back rolls.

The front rolls K run faster than the back rolls and thus produce the drawing effect.

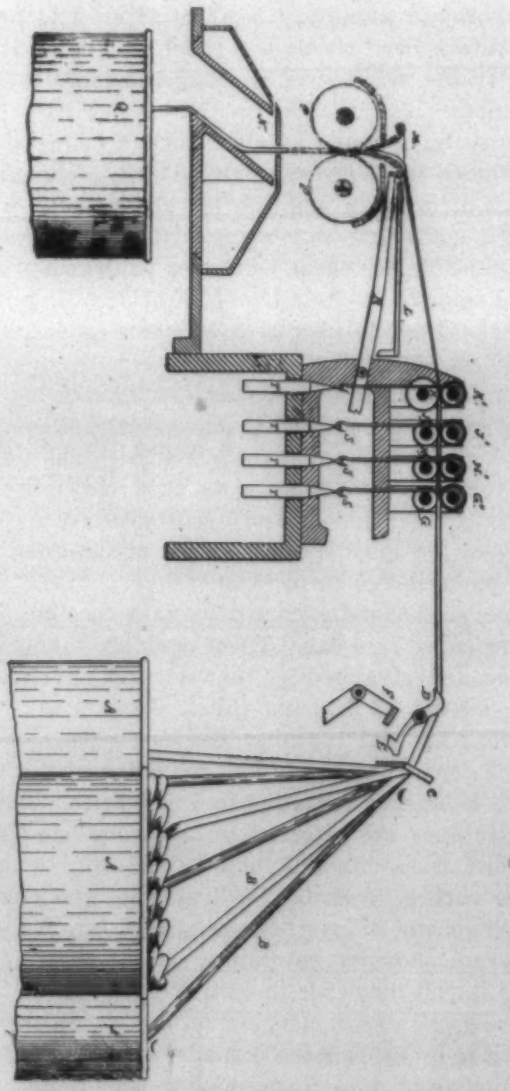


Fig. 17. Section of Drawing Frame.

Sliver leaves front roll K and passes through trumpet M.

Calender rolls P draw it through trumpet and deposit it through hole in cover plate to coiler N.

Coiler N revolves in the same manner, as coiler on cards (24) and coils the sliver in can Q.

Stop Motions.

65.5 Drawing frames are provided with stop motions, for the purpose of automatically stopping the machine whenever certain conditions are not exactly right. There are mechanical and electrical stop motions. Fig. 17 exhibits portions of the usual mechanical stop motions. To avoid complications, the entire mechanism is not shown. F is an arm, connected with shaft of machine in such a way that it oscillates around its pivot. As long as this arm is left free to oscillate, the machinery may run. But if this motion is interfered with, a strong spring is released, and shifts the belt to loose pulley and stops machine. The spoon D E is so weighted that when no sliver is passing, it assumes nearly a vertical position. When a sliver of proper weight is being drawn over it, the end D is depressed, as shown in Figure 17. If sliver can should run empty, or if sliver should break, or if it should be much too light, the heavy end E would drop down, and the claw would arrest the oscillating arm F and stop the machine. Thus the machine will not run unless each one of the entire lot of (say 30) slivers is in place, and of approximately the correct weight. This is known as the "spoon (or back) stop motion." The spoon stop motion is of great value for preventing what is technically (though erroneously) called "singles."* That is, the accidental feeding of 5 ends or less into one, where there should be 6. If this should occur, there would be a thin place in the drawn sliver, which would make itself felt throughout the succeeding processes, resulting finally in uneven yarn and cloth. A part of the "front (or trumpet) stop motion" is shown at R. One end of R rests under trumpet M, while the other end is weighted, and connects with an oscillating arm in the same manner as the spoon. As long as a normal sliver is passing through trumpet, friction in the trumpet holds trumpet and arm down, as shown. But if a lump or an extra heavy place occur in the sliver, it cannot pass through the small hole in the trumpet. The sliver thus breaks and the weighted end of R drops down, engages the oscillator and stops the machine.

A "full can stop motion" is also generally applied to drawing frames. When can runs full, the coils of sliver pile up under coiler plate and lift it a small distance. A lever connection similar to R is attached to the coiler plate, so that when this plate rises, the lever engages oscillator and stops the machine as before.

Equipped with all of these stop motions, it is impossible for a drawing frame to run, unless all of the conditions are right. Therefore one attendant, usually a boy, may run several frames.

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*A "single," anywhere in the mill is the accidental feeding into a machine of a fewer number of doublings than is required. For example, a single occurs on a lapper when the machine is supposed to be working 4 laps, and 1 or 2 laps run out, so that only 3 or 2 laps are fed. A single occurs in a drawing frame when 6 slivers are being drawn into 1, and one or more slivers, from some cause, fail, and 5 or less are fed instead of 6. The term originated in spinning and roving machinery, where only 2 ends are doubled into 1. If one fails, of course what is left is "single." Its use has spread to include the broader cases. It is sometimes also called "singling."

(Continued next Week)

Index To Advertisers

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

13,566,000 Bale Crop Forecast

Washington, Aug. 8.—This year's cotton crop declined to the extent of 22,000 bales between July 16 and August 1, the Department of Agriculture's August 1 forecast of prospective production, issued today, places the crop at 13,566,000 bales compared with a forecast of 13,588,-00 bales based on the July 16 condition.

A total production of 13,566,000 equivalent 500 pound bales of cotton this year was forecast today by the Department of Agriculture.

The forecast was based on the condition of the crop August 1 which was 65.6 per cent normal, indicating an acreage yield of 139.8 pounds.

Ginnings of cotton of this year's crop prior to August 1 totaled 159,-373 running bales, counting round as half bales, compared with 21,795 bales to that date in 1924 and 64,-381 bales in 1923, the census bureau announced.

Today's forecast compared with 13,588,000 bales announced a fortnight ago on the condition of the crop on July 16, which was 70.4 per cent of normal, indicating an acre yield of 140 pound. Production last year was 13,627,936 bales, the final acre yield of the crop August 1 was 67.4 per cent.

The condition of the crop on August 1 and the indicated acre yield by States follows:

Virginia, condition 75 per cent; indicated yield 244 pounds.
North Carolina, 75 and 244.
South Carolina, 62 and 155.
Georgia, 66 and 132.
Florida, 80 and 112.
Missouri, 84 and 269.
Tennessee, 82 and 189.
Alabama, 74 and 141.
Mississippi, 81 and 182.
Louisiana, 69 and 135.
Texas, 49 and 95.
Oklahoma, 72 and 147.
Arkansas, 87 and 200.
New Mexico, 75 and 172.
Arizonia, 92 and 258.
California, 90 and 279.
All other states, 89 and 167.

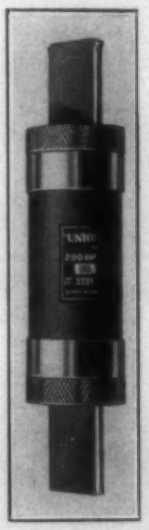
"For the cotton belt as a whole the condition of 65.6 per cent on August 1 indicates about 13,566,000 bales of 500 pounds gross weight, a change of only 22,000 bales from the figure of 13,588,000 bales indicated by the condition on July 16. Further declines due to drought in portions of Texas and Oklahoma have been about offset by a lessening of the weevil menace in the southeast and by the enhanced prospects in Arkansas, Tennessee, and Missouri. Army worms, rust, lice, and wilt are reported from scattered localities in Louisiana, Mississippi, and adjoining States. Lice have practically disappeared in Texas.

"In Texas, after July 16, excessive temperature and hot winds did great damage, causing the plants to shed forms, blooms, and small boll, and leaves. The growth was stopped except in favored localities and a desirable amount of the young cotton died. The number of bolls reported by correspondents to be safe in Texas is only one-half as many as on the same date last year.

"Union" Renewable Fuses

One of the most noteworthy developments in the design and construction of electrical fuses recently has been made by the Chicago Fuse Manufacturing Company of Chicago, pioneer manufacturers of electrical protecting materials and conduit fittings. It consists of modifications in the company's line of "Union" renewable fuses of the knife-blade type which make these fuses exceptionally simple in design and construction.

To fuse users the significance of this development is that features of extreme durability and easy renewal have been added to the consistent and reliable performance which has characterized "Union" renewable fuses, and these features will serve to minimize the cost of fuse maintenance wherever they are used. Durability is gained by the rugged construction made possible by simplified design, and an unlimited number of renewals is afforded, thus



giving maximum length of service. Renewal also is made easy, reducing the time and labor required to a minimum.

The accompanying illustrations show the details of design and construction. When the fuse is taken apart for renewal of the fusible element, there are only three loose parts—the fibre case to which the threaded brass ends are securely attached; the knife-blades which are connected by a rigid fibre bar and to which the fusible element is bolted; and one of the loose screw caps which hold the knife-blade member in position.

All that is necessary to disassemble the fuse is to unscrew the two caps, and then slip out the entire knife-blade member after one end of it has been shifted slightly to get it out of its locked position. One of the caps can be removed, but the other is held on the knife blade by two nibs. Assembly is accomplished just as readily, and the ease and quickness with which the entire operation can be done, together with the small number of loose parts, reduces time and trouble in making renewals to a minimum.

Extra heavy grey horn fibre is used in the construction of the case so that it will withstand the pressure developed by the blowing of the fusible element. The brass ends are securely attached to the fibre, and venting, which is an important feature of fuse operation, is accomplished by means of a number of grooves cut longitudinally in the fibre where attachment is made to the brass ends. After the ends are put on, these grooves become ducts which are large enough and of sufficient number to permit the escape of the gases caused by the volatilization of the fusible element and to relieve the case of the pressure generated; yet they are small enough so that the flame is effectually quenched before it reaches the outside. Also, these vents prevent molten metal from getting into the threads of the caps and causing them to stock and make removal difficult.

From the illustrations it will be noted that the simplified design gives large openings in both casing ends, thus making it easy to inspect or clean the inside.

The knife-blade member, to which the fusible element is attached, consists essentially of two sections of flat copper which are connected by a rigid fibre bar. These connections are made by means of rivets and

screws, and the assembly is so rigid and substantial that the copper blades are positively held in position and perfect alignment, assuring permanent contact with the clips. The connecting bar, which is attached by means of screws, may be readily replaced in the event of damage or breakage.

The fusible element makes direct contact with both knife blades and is held down at each end by a stud and washer. When making renewal these studs need to be loosened only slightly, and the fusible element, which is notched at both ends, can be slipped in and the studs tightened; there are no through bolts, with heads that have to be held or nuts that can be lost or misplaced. The design of the fusible element is an exclusive feature of "Union" renewable fuses, which blow without violence or flash, fusion occurring

midway between contacts so that the metal parts are always clean.

These new fuses will be fully approved by the underwriters and are made in all standards ratings—from 65 to 600 amperes, 250 or 600 volts.

German Dyestuffs Trade Hard Hit

That the German dyestuffs monopoly which before the war dominated the world has been definitely broken is shown by statistics submitted to the Department of Commerce by Consul A. W. Kliefoth, Berlin. A comparison of the official German figures shows that 2,144 metric tons of dyestuffs left Germany during the first three months of 1925, as compared to 31,594 metric tons for the first quarter of 1913. Shipments for the first three months of 1922 amounted to 15,257 tons, in 1923 they dropped to 11,464 tons, while for the corresponding period of 1924 they declined to 9,832 metric tons. The fundamental causes for the large decline of German dyestuffs exports are to be found in the steady development of the dyestuff industry in the chief countries of the world, the changed market conditions, and the protective policies of many European nations, who during the war were enabled to extend their own markets in Spain, Portugal, and other countries.

Before the war, four-fifths of the German production, amounting to 80,000 metric tons was absorbed by the world market. The continent equalled 75 per cent of the world demand. Europe received more than 31,600 tons, valued at 73,191,000 marks, which equalled more than half of the German exports. According to official figures for 1913, exports to Great Britain amounted to 11,016 metric tons, and the exports to Austria-Hungary equalled 18 per cent, Italy 13 per cent, and Belguim 8 per cent of the German exports; and the Netherlands and France 8 per cent each. These countries together received 82 per cent of German dyestuffs exports. Imports into Germany, on the other hand, amounted only to 2,552 metric tons, or 5,870,000 marks, of which 75 per cent were imported from Switzerland. According to the figures of the German Customs Tariff for 1914, the German European trade in dyestuffs amounted to a favorable balance of 67 million marks.

Changed conditions after the war made impossible a German dyestuffs balance on a power basis. The industry has partly lost its market in Western Europe, especially in Great Britain, France, and Belgium. This loss amounts to about 65 per cent, but it is not felt to its full extent as conditions in the South Eastern and Eastern European markets have improved for German dyestuffs, especially in Russia, Poland, Rumania, Bulgaria, and Greece, where German dyestuffs still hold a dominant position. Soviet Russia has also become an important customer during the last few years.

Mercerizing Piece Goods

(Continued from Page 8)

As explained in a previous paragraph, the caustic must thoroughly penetrate the cloth to insure the best mercerizing results. Various will require different lengths of weights and constructions of cloth time in the bath to be properly penetrated. When the goods are thoroughly penetrated they become transparent. The cloth should be watched as it goes over and under the rolls, to find at just what point the goods become tranparent, and then all the extra rolls should be eliminated. After one becomes experienced one can readily tell by looking at the cloth just about how long it will take in the caustic. The wash water at the end of the frame can be regulated in a similar manner. This type of saturator has its advantages over the saturator containing only a few rolls, the top rolls of which are generally placed under or just above the liquor, because the speed of the machine does not have to be sacrificed to insure good penetration.

Mercerizing Damages

The mercerizing department, if not carefully supervised, will cause considerable damage and many lots of seconds. The most frequent damages are torn selvages and let-outs. This may be caused by poor working clips or clips that become nicked; secondly, by trying to stretch the cloth beyond its elastic limit; thirdly, by not feeding the cloth into the frame evenly or by allowing the edges to double over in case of wide selvages; fourthly, by having too great a tension, and, fifthly, by allowing the cloth to stay in the caustic too long.

Another mercerizing damage that does not appear until the cloth goes through the succeeding processes is cloth mercerized less than the required finishing width. This causes the selvages to tear when the finisher tries to pull the finished goods out of the required width. When the clips are nicked or do not seat properly they may cause small cuts in the selvages which are not noticed on the mercerizer; but when the goods are pulled through the bleach-house washers, the strain breaks the cloth at these small cuts.

Uneven mercerizing is caused either by poor keir boiling, uneven washing at the sprays, or uneven wetting of the goods (in cases where the goods are mercerized wet). These do not show up in the white, but in dyed goods they show up as streaks. By not thoroughly washing out the caustic and allowing parts of the goods to become dry while in this state, then not souring properly, these appear as resists in dyed goods, especially in pad dyeing.

Seams are sometimes broken when the proper quality of sewing threads is not used. Oil stains are quite frequent if the chains are not oiled carefully; care must be taken in the selection of the oil used. A good saponifiable or emulsifiable oil must be used instead of the ordinary mineral base oil. Spots caused by this latter are very difficult to remove. There are certain automatic oiling attachments on the market which are very efficient in oiling the chains.

Souring

Silk and cotton union goods may be mercerized in the regular way, but must be soured immediately after coming off the mercerizing range; otherwise the silk will be seriously tendered. The souring and final washing is generally done in an open width compartment washing machine. This machine consists of an acid compartment and several clean water-washing compartments, and is run tandem with the mercerizing range.

A part from producing lustrous cloth, mercerizing is resorted to for still another purpose; the shrinking of cotton goods. This resembles fulling in a woolen mill to some extent. Goods of, say 40 inches wide may run through the range and the frame set 34 or 36 inches. This thickens the goods and changes the feel; they also have better affinity for dyestuffs.

There are several manufacturers tenter frames which may be used in the stretching apparatus of the mercerizing range. Some make light frames which are serviceable only for lighter weight cloth. One or two make a heavy frame which will handle any kind of cloth. This frame, of course costs more than the lighter ones, but in the long run pays for itself, having fewer breakdowns and a longer life. Some frames are equipped with ball or roller bearings, which is a great improvement.

The type of range used, as well as the kind of cloth to be mercerized, governs the speed at which the machine may be operated. With a long caustic bath, heavy mangle, heavy roller bearing tenter frame and sufficient washing capacity, a speed of 100 yards per minute may be used and very excellent results obtained on even fairly heavy cloth. —American Dyestuff Reporter..

The Packing of Cotton Piece Goods For Export

(Continued from Page 11)

specially protected accordingly. The same may be said of Colombia, and the Indian rainfall produces a dampness in the air that is harmful to good not fully protected.

The necessity of protecting goods from the would-be pilferer has already been touched upon, and there are a host of neat, efficient cases and cheap metal devices available for experiment. Many specialist packers have evolved their own devices, based upon practical experience, and will incorporate them when cases are being built. At least this aspect of the packing problem must be attended to, for no marine policy, however comprehensive, can give satisfaction to the exporter as would the safe arrival of his goods at their destination, leading to a satisfied customer and repeat orders. —Manchester Guardian.

Clark's Cotton Records

Statistics for Week ending August 8, 1925.

Visible Supply American Cotton	1,038,000	1,105,000	912,000
Into sight for week	80,000	46,000	55,000
Spinners' takings for week	158,000	61,000	138,000
Spinners' takings since Aug. 1	158,000	61,000	138,000
Exports for week	55,000	17,000	28,000
Exports since Aug. 1	55,000	17,000	28,000

Government Reports.

	1925	1924.	1923.
Acreage this season	40,403,000	38,709,000	34,016,000
Indicated crop July 25	12,144,000	11,412,000	11,065,000
Indicated crop middle of July	11,934,000		
Indicated crop end of July	12,351,000	11,516,000	11,449,000
Indicated crop middle of Aug.	12,956,000		
Indicated crop end of Aug.	12,787,000	10,788,000	10,575,000
Indicated crop middle of Sept.	12,596,000		
Indicated crop end of Sept.	12,499,000	11,015,000	10,135,000
Indicated crop middle of Oct.	12,675,000		
Indicated crop end of Oct.	12,816,000		
Indicated crop middle of Nov.	12,992,000		
Indicated crop end of Nov.	13,153,000		
Ginned to Oct. 1st	4,527,671		
Ginned to Oct. 18th	7,600,826	6,415,145	6,078,321
Ginned to Nov. 14th	11,163,400		
Ginned to Dec. 1st	12,225,000		
Ginned to Jan. 16, 1925	13,308,037		
Ginned to March 20 (final report)	13,618,751		
Carryover beginning cotton year	2,319,000	2,573,000	4,879,000

Cotton Exports.

Following is a comparison of the exports by months in running bales, including linters:

	1924-25.	1923-24.	1922-23.
August	277,641	244,415	272,808
September	737,010	689,435	378,390
October	947,556	781,722	798,664
November	1,306,000	770,002	858,337
December	1,076,000	845,581	607,853
January, 1925	1,076,000	546,253	473,436
February	818,838	482,146	359,657
March	734,697	332,168	318,210
April	472,555	320,774	259,984
May	330,967	326,357	160,368
June		230,979	214,851
July		211,633	171,469
		5,772,000	4,864,027

American Consumption of All Kinds of Cotton, Excluding Linters.
(In running bales, 000s omitted.)

	1924-25		1923-24		1922-24	
	Per Month	Per Season	Per Month	Per Season	Per Month	Per Season
August	357	357	492	492	526	526
September	435	792	484	975	494	1,020
October	530	1,322	542	1,517	534	1,554
November	492	1,814	532	2,049	579	2,133
December	533	2,347	462	2,510	529	2,663
January 3	589	2,936	577	3,088	610	3,273
February, 1925	550	3,486	508	3,595	567	3,840
March	582	4,068	484	4,079	624	4,464
April	597	4,665	480	4,559	577	5,041
May	531	5,196	414	4,991	621	5,661
June	493	5,689	350	5,341	542	6,203
July			347	5,688	463	6,666

Cotton Goods

New York.—Trading in the cotton goods markets was not quite so active as during the previous week, but prices held steady. Moderate sales of print cloths for deliveries in September and October were reported. The trade showed a tendency to wait for the Government report on cotton on Saturday and considerable business was delayed for that reason.

The great activity in rayon and cotton mixtures for fall and spring continued and is regarded as one of the most remarkable phases in the textile industry. Indications are that the greater part of the novelties in wash goods for spring will feature rayon.

There was a fairly good demand for denims for delivery in August and September, but mills were unwilling to sell far ahead at present prices. There was also some improvement in the demand for colored domestics. Business in bleached goods ginghams and other staples was quiet.

Cloths were quiet as the week ended in the staples in print cloths and sheetings. For late deliveries of 68x72s 10¼ cents was the best that was done for the week. September 60s are held firm at 9⅝c. Odd lots of sheetings sold without important price changes. About 5,000,000 yards of pajama checks have been contracted for this week and considerable forward business was done in pongees and broadcloths.

The market for 144x76s combed broadcloth continued 24 c to 25c; 120x64s two-ply by single, 28½c to 31c, with full weight at 30c. The 100s two-ply were 45c for domestic and 54c for contract imported makes, deliveries to begin October. The 128x68s, rayon filled in the gray, were 40½c up.

There were a number of fair sized orders placed quietly for tire fabric during the week. The tire companies have not been unwilling to place business as far forward as through 1926. Leno breakers, 8 and 10-ounce, quoted 47c to 50 c.

The demand for cotton duck was very limited last week. Quotations were unchanged from the week before. Quite a nmber of sales of seconds of various heavy goods were reported. Hose and belting duck was quoted 41c to 43c and wide and sail duck 37½c and 5 to 40 and 5 off.

The week in Fall River print cloth market was one of the slowest in a period of a month, with the total sales for the week estimated at less than 50,000 pieces. This volume is about half the total reached for the last three successive weeks, and is confined exclusively to sateens and twills, and a moderate amount of 36-inch low counts. Inquiry has been small. Spot and nearby goods have been the rule, with mill refusing business going any time into the future.

Wide and narrow print cloths have been very quiet except for small orders being put through now and then at current quotations. In sateens, trading has been on the basis of from 12 to 12½ cents for 4.37, according to grade. Interesting cotton condition reports as furnished by the Government is given as the reason for the lack of interest in the goods market.

John V. Farwell Company, Chicago, says in their weely review of trade: "Wholesale dry goods road orders show good increase over previous week and corresponding week of last year in volume and number of orders received. Buyers have been in market in larger numbers. Noticeable increase in demand for domestic, ginghams and cotton goods lines. Broad range of woolen goods selling for fall. Collections show gain."

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s	7½
Print cloths, 28-in., 64x60s	6⅞
Print cloths, 27-in., 64x60s	6⅝
Gray g'ds, 38½-in., 64x64s	10⅛
Gray goods, 39-in., 68x72s	10½
Gray goods, 39-in., 80x80s	12½
Brown sheetings, 3-yard	13¾
Brown sheetings, 4-yard	10½
Brown sheetings, stand.	14¾
Ticking, 8-ounce	32½
Denims	19
Staple gingham, 27-in.,	11½
Kid finished cambrics	9½a10½
Dress ginghams	13½a17½
Standard prints	9½

Cotton Cloth Imports into India.

India's imports of cotton piece goods during June amounted to 108,087,000 yards, compared with 128,511,000 yards during the previous month, Assistant Trade Commissioner cables the Department of Commerce from Bombay. The decrease was registered in each class. Of the June total, 54,440,000 yards were grey, 31,447,000 bleachd, and 22,200,000 colored. The United Kingdom supplied 74 per cent of the greq, 96 per cent of the white, and 77 per cent of the colored. Japan furnished 25 per cent of the grey and 15 per cent of the colored.

The Yarn Market

Philadelphia, Pa.—The yarn market continued very dull during last week, buyers being more interested in awaiting the Government crop report on Saturday than in purchasing yarns. Some scattered reductions in the price of carded yarns were made by dealers, but mill held prices firm. There was a fairly large inquiry for knitting yarns, inquiries covering lots of from 20,000 to 100,000 pounds with deliveries running as far ahead as the end of the year, but sales were limited on account of the inability of buyers and sellers to get together on prices. Some fairly goods sales of knitting yarns from 12s to 30s were made in small lots, but no large contracts were reported. Sales of carded weaving were generally light. Combed yarns sales were fairly large and showed some advance in price. Mercerized yarns were dull. Regarding the stocks of combed yarns held by mills, a report from Gaston county showed that stocks held by mills representing a million spindales amount to only 260,000 pounds in counts above 40s.

The uncertainty of the cotton situation continued as one of the factors contributing to the general dullness of yarn. The latest Government report, issued at noon on Saturday, was not received in time to affect the market before this week.

Prices published in this market were as follows:

Southern Two-Ply Chain Warps.

2-ply 8s	39	a...	2-ply 26s	45	a...
2-ply 10s	39½	a...	2-ply 30s	46½	a47
2-ply 16s	41	a...	2-ply 40s	57	a...
2-ply 20s	41	a41½	2-ply 50s	68	a...
2-ply 24s	44	a...			

Southern Two-Ply Skeins.

8s	38	a...	40s	56	a...
10s to 12s	38½	a39	40s ex.	59	a60
14s	39	a40	50s	68	a...
16s	40½	a...	60s	72	a74
20s	40½	a41	Tinged Carpet—		
24s	44	a...	3 and 4-ply	35	a...
26s	44½	a...	White Carpet—		
30s	46	a...	3 and 4-ply	37	a...
36s	54	a...			

Part Waste Insulated Yarn.

6s 1-ply	34	a...	12s, 2-ply	37	a...
8s, 2, 3 and 4-ply	35½	a...	20s, 2-ply	40	a...
			26s, 2-ply	44	a...
10s, 1-ply and 3-ply	36	a...	30s, 2-ply	45	a...

Duck Yarns.

3, 4 and 5-ply			3, 4 and 5-ply—		
8s	37½	a...	16s	40	a42
10s	38½	a...	20s	42	a43
12s	39	a40			

Southern Single Chain Warps.

10s	38	a...	24s	43	a...
12s	39	a...	26s	44	a...
14s	39½	a...	30s	46	a...
16s	40	a...	40s	55	a...
20s	41	a...			

Southern Single Skeins.

6s to 8s	38	a...	20s	40	a40½
10s	38½	a...	22s	41	a...
12s	39	a...	24s	43	a...
14s	39½	a...	26s	43	a...
16s	40	a...	30s	45	a...

Southern Frame Cones.

8s	38	a...	22s	41	a41½
10s	38	a...	24s	42	a42½
12s	38½	a...	26s	43	a43½
14s	38½	a...	28s	44	a...
16s	39	a...	30s	45	a...
18s	0	a...	30s tying in.	44	a44½
20s	41	a...	40s	56½	a57

Southern Combed Peeler Skeins, Etc.

2-ply 16s	56	a60	2-ply 50s	80	a...
2-ply 20s	58	a62	2-ply 60s	87½	a90
2-ply 30s	65	a67	2-ply 70s	1 02½	a...
2-ply 36s	70	a75	2-ply 80s	1 12½	a1 15
2-ply 40s	75	a80			

Southern Combed Peeler Cones.

10s	48	a49	30s	60	a...
12s	49	a50	32s	62	a...
14s	49½	a50½	34s	65	a...
16s	52½	a...	36s	67	a...
18s	51	a52	38s	69	a...
20s	52	a...	40s	70	a...
22s	53	a...	50s	75	a...
24s	56	a...	60s	87½	a90
26s	56½	a...	70s	97½	a...
28s	57	a...	80s	1 10	a...

Eastern Carded Peeler Thread—Twist Skeins.

20s, 2-ply	50	a...	36s, 2-ply	63	a...
22s, 2-ply	51	a...	40s, 2-ply	65	a...
24s, 2-ply	56	a...	45s, 2-ply	70	a...
30s, 2-ply	59	a...	50s, 2-ply	75	a...

Eastern Carded Cones.

10s	41	a...	22s	44	a...
12s	42	a...	26s	51	a...
14s	43	a...	28s	53	a...
20s	47	a...	30s	55	a...

Egyptian Market for Silk and Rayon Hosiery.

Of the total value of rayon hosiery imported into Egypt during the first four months of 1925, the United States furnished almost half, or goods worth $10,000, Trade Commission Richard A. May, Alexandria, informs the Department of Commerce. The next largest shipper of rayon hosiery to Egypt is Germany, followed by France while the United States ranks second sending a little over $3,000 worth during the first four months of 1925. American manufacturers and exporters of rayon and silk hosiery in considering the Egyptian market should bear in mind the fact that price is the most important element with respect to competition. However, liberal and judicious advertising as well as the selection of well placed exclusive import representatives are essentials which must not be overloked. Egypt may be differentiated from the nearby markets of Syria and Palestine in that French hosihas a much greater vogue, especially in the higher qualities and fancy lines. Clocks and stripes are popular.

Constantinople Firm Desires Market for Textile Products.

An exporter in Constantinople desires an American market for furs, wool, and mohair, according to information received from Hermon G. McMillan, secretary, in absence of Commercial Attache.

Want Department

Wanted

Position as electrician for textile plant or power house. Have had several years' experience on motors in cotton mills. Have also had experience in repair shops rewinding motors. Thirty years old and married. Address N. C. T., care Bulletin.

Wanted

Position as overseer of carding and spinning, winding, spooling, warping. 20 years' experience. Age 44, married. 7 years with present company. References. Address T. G. H., care Southern Textile Bulletin.

Help Wanted

We need one fixer for 70 Lowell looms on light weight sheetings and one for 80 Staffords, same kind of goods. Mill running 55 hours week regularly. Address P. J. Long, Overseer Weaving, Bonham, Texas.

Wanted

Position as superintendent of a yarn or cloth mill. 25 years' experience on fine yarns and cloth. Have no bad habits, and can get results. Now employed but want a larger job. Excellent reference. Address H. P. W., care Southern Textile Bulletin.

Position Wanted

By experienced overseer carding. Hard, conscientious worker who knows how to handle help. Can furnish best of references. Address N. E. T., care Southern Textile Bulletin.

Wanted

Position as roller coverer by married man 32 years old. Twelve years' experience as foreman. Best references. L. R. Henry, Anderson, S. C.

Position Wanted

Young carder wishes to make change. No night work or small job considered. Job in Alabama preferred. Textile education. Address Carder A-1, care Southern Textile Bulletin.

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Information Wanted

In regard to whereabouts of W. D. Cooper, a cotton mill employee, who left home some time ago. About 6 feet tall, black hair, dark skin, and has 2 front teeth missing. Notify Mrs. Lucy Cooper, Lafayette Cotton Mill, Lafayette, Ga.

Wanted to Buy.

Southern Spinning Mill, eight to ten thousand spindles, equipped for 20s to 30s-1 carded yarns. Give location and price. Address P. O. Box 429, Gastonia, N. C.

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